Briefing and Conference Techniques

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Briefing and Conference Techniques

GLENN M. LONEY, Ph.D.
University of Maryland

McGRAW-HILL BOOK COMPANY, INC.

NEW YORK
TORONTO
LONDON
1959

BRIEFING AND CONFERENCE TECHNIQUES

 Library of Congress Catalog Card Number 58-8849

II

For My Father

Preface

Books dealing with speech planning and speechmaking abound. Many useful and provocative texts present the problems of group discussion and conferences. There are a number of excellent specialized studies dealing with the use of audio-visual aids, but these are usually written from a classroom teacher's point of view. Few, if any, works exist which specifically explain the processes of written and oral briefing.

The purpose of this book is not to throw one more handbook on the heap of speech and conference textbooks, nor is it to compound confusion by dragging in classroom teaching methods or military instruction techniques. Rather, the four sections of this book are designed to mitigate some of the existing confusion by bringing together in one source the *main points* to be remembered in using the closely related skills of public speaking, employing audio-visual aids, briefing, and conferencing.

Essentially, this little text should be treated as a summary of principles, rather than an exhaustive study, which it obviously is not. It is intended for the student who needs a general outline or "road map" for these important aspects of speaking. It has also been planned for the executive, the military man, the scientist, the professional man, and the layman without previous training who may find himself faced with the problem of giving a speech or participating in a group discussion.

Here, in one book, may be found the most important things one needs to know about preparing and delivering a speech. Here, abstracted from the schoolroom, are the fundamentals governing the use of audio-visual aids in a variety of speech situations. Here are the essentials of written and oral briefing, useful alike to public speaker, teacher, or conferee. Here, also, are the principles governing successful group discussions and problem-solving conferences.

Too often, the novice, asked to "give a little talk to the Rotary Club next week," can find no general source which will give him good advice on how to prepare and deliver his speech. So many speech texts are de-

signed to be studied carefully in class, with discussion of difficult points in the text. Such books, while admirable for their purpose, do not make good ready references for the desperate amateur speaker.

Awareness of this problem was the genesis of the present book. Obviously, no beginner will become a second Demosthenes or a Federal mediator simply by reading this survey text. But he can gain increased success in speaking through understanding and practicing the principles here set forth. The serious student can then go on to additional readings in specialized works in order to broaden his knowledge. Some of the more outstanding books related to the content of this study are listed in the Appendix in the hope that the readers will investigate them as well. No Index has been provided for the book since a complete Contents makes it possible to locate any topic readily. The Contents is a formal outline, because the text itself has been built around a visible outline in order to serve as an example of the very organizing and outlining skills that it is teaching.

Thanks must be given to many people for the ideas in this book, but it is difficult to single them out, for the text is a distillation of university lectures, personal experience, debates and discussions with other teachers, wide reading in the field, and speculation on the future. Where possible, credit is given in the body of the text.

Glenn M. Loney

Contents

Briefing and Conference Techniques

SECTION 1 | Basic Communication

PURPOSE: To review and summarize principles of speech composition and delivery which are essential to effective use of the sections on Audio-Visual Aids, Briefings, and Conferences.

I. Introduction

A. This section is designed for the man who has had practical experience in speaking to groups but has not studied the theory and techniques of public speaking. It is also intended as a review for those who have already studied the techniques. For the man who has had neither experience nor training, this section can be only a general introduction. The brief discussion in these pages is not meant to take the place of the many good texts available to the novice speaker. Several especially good speech texts are listed in the appendix.

B. The discussion will be concentrated on those aspects of public address which are considered essential in briefing and in conference speaking situations. Nothing will be treated in detail since so many readily obtainable books offer extensive explanations and drills.

Though basic communication includes the skills of reading, writing, listening, and speaking, only writing and speaking will be treated here. Important aspects of reading and listening which pertain to the speaker's task of finding and retaining information are treated in Section 3, Written and Oral Briefing Techniques, and in Section 4, Conference Techniques.

C. Writing and speaking will be discussed as (1) Speech Preparation, and (2) Speech Presentation.

1. Preparation must be studied first because a speaker must have something to present before he makes his presentation.

2. Presentation, though given second place, may be the more important of the two, for bad delivery can ruin a well-constructed talk, and good delivery can often make a mediocre one sound much better than it is.

II. Discussion: Survey of Techniques of Preparation and Presentation

A. SPEECH PREPARATION: Many variables are at work in the initial stages of speech planning. To decide how you will shape your speech to achieve maximum effect, you must be able to evaluate these variables accurately. For that reason, this review will begin with the germ of a speech and end with the composition of it, indicating the various important considerations involved.

1. REASONS FOR THE SPEECH: Despite seeming evidence to the contrary, there is always a reason for giving a speech. All too frequently the reason may not be apparent to the audience—or, in some cases, to the speaker himself. When the audience asks itself, "What *is* he doing up there?" or when a speaker mutters to himself, "*What* do they want me to say to them?" it is possible that the reasons for giving the speech have not been clearly defined either for the audience or for the speaker.

   Speeches are generally given for one of two reasons. They are invitational or volitional. Some speeches are both invitational and volitional in origin, but most are either one or the other. When making an invitational speech, your reason for speaking, reduced to absurdity, is this: You already have an audience; now you have to give some kind of speech to them. When making a volitional speech, you have a passion to speak on a topic—or perhaps just a passion to speak—but you must find an audience to listen to you.

   a. Invitational Speeches: If one were to study all the public speeches given in one year for the American audience, it might be revealed that most of them were invitational, rather than volitional, with the notable exception of legislative speaking. One reason for this is that the convocation of an audience is not always easy to arrange for a man who merely wishes to air his prejudices or random thoughts from a public platform. In most cases, the audience expects something special from a speaker. The attempt to satisfy that expectation is the genesis of his speech.

   Even when a vast throng has been rallied to hear words of wisdom from a candidate for political office, the speaker is not completely free

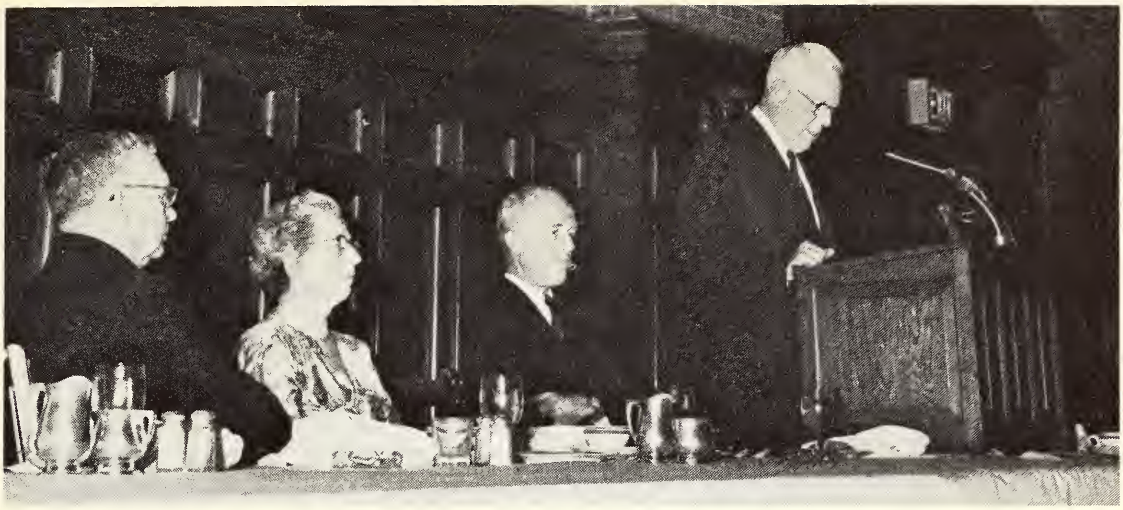


FIGURE 1–1. Chief Justice Earl Warren speaks at Yale. Such an invitational speaking situation is typical of the majority of occasions at which speeches are given. Here, Justice Warren reads from a manuscript to ensure that no errors or interpolations creep into the talk. (Courtesy of the Yale University News Bureau.)

in what he may say. The nature of the audience may directly dictate both his topic and his treatment of it. A farm audience may not want to hear a speech meant for factory workers, for example. Even if the audience has made no implicit claims as to the content of a political speech, the campaign managers certainly will have had their say in the matter.

The vital considerations in invitational speaking are the *audience,* the *occasion,* and the speaker's *ability* to meet the needs of the situation.

If you, for instance, have been selected or requested to speak to a group, you may assume that the honor has been conferred on you for one or more of these reasons: (1) You are an interesting or even a famous personality. (2) You have the reputation of being a good speaker. (3) You are known to represent a point of view, a belief, or a group which the audience wants to know more about. (4) You hold some official position in government, military service, business, or social life. (5) You have some special knowledge or experience. (6) You are available, and you will speak—possibly free of charge.

When a speaker considers these six possibilities, he should decide honestly which reason or combination of reasons has caused him to receive an invitation to speak. If he has been asked to talk because he has just returned from a long visit to Africa, he may assume that the audience would like to hear of his travels. He then has the germ of his

speech. If, however, the audience in question is composed of the members of the Society for the Prevention of Cruelty to Animals, he probably should avoid a spirited account of his exploits in killing big game in the Belgian Congo.

What the speaker must remember is that he has an obligation to his audience to deliver something of worth on a specified occasion. In preparing his speech, then, he knows he has a reason for speaking, and he also knows, in a general way, what may be expected of him.

b. Volitional Speeches: Many times each day, man presents volitional speeches because he is strongly moved to express himself. Usually there is little or no preparation for such speeches, and they are not presented formally. They are outgrowths of conversational discussion. Often the speaker may merely be parroting what he has heard someone else say; or he may be quoting from himself, repeating theories, experiences, or prejudices he has grown fond of through constant repetition. A frequent warning that such an impromptu oration is at hand may be: "That's *your* opinion. Now, here's what *I* think." Or, "Just a minute, now. You're all wrong. The real reason Congress can't pass the bill is . . . ."

A true volitional speech requires preparation. Because this preparation must often take place in a vacuum, volitional speeches, as formal presentations, are less frequent than invitational ones. The vacuum, it might be explained, refers not to the speaker's mind, but to the potential presentation situation. The speaker has a passion to speak, he has a subject on which he wishes to speak passionately, but one thing is lacking. He has no "tailor-made" audience to hear his impassioned talk. At such times, a speaker will have to decide what kind of audience he would like to address, if the group were available. He then should plan his speech in terms of the imaginary audience, just as he would for an invitational talk. Part of his preparation must include, then, the convocation of the appropriate audience, or the speech will never be heard.

Many volitional speakers, beginning their careers by exercising their talents informally on their friends, have been told to "Go hire a hall!" If the volitional speaker can't afford to hire a hall, he can always stand on a soapbox in a public park provided, of course, he can secure the permission of the proper authorities and the protection of the American flag.

If haranguing a strange crowd is too much of an ordeal for the man with a passion to speak, he can search out a ready-made audience and offer his topic to them. Clubs, lodges, religious bodies, political groups, business and professional organizations, and even social groups often need guest speakers and are usually interested in having dedicated speakers on significant subjects.

A man who cherishes a continual desire to make speeches and who wants the guaranty of a ready audience might consider running for Congress or becoming a university lecturer. Even here, though, the speaker's subject and treatment must be interesting. If his speech is unsatisfactory, he may still find himself without an audience. Fellow congressmen can stay home, and college students can go to sleep— or read the funny papers.

Basically, the volitional speaker, as well as the invitational speaker, must have a *reason* for speaking. He must also have something to say that the audience needs or wants to hear.

2. CHOOSING THE SPEECH TOPIC: When you know what your reason for speaking is, you can select a general subject area for your talk. Either you are already, like the volitional speaker, burning to speak on a topic, or you know that the audience, the occasion, and the fact that you, rather than someone else, have been chosen, all indicate that there are certain subjects which will be especially appropriate.

In deciding what general subject area you will choose, think of the demands and/or needs of the audience and of the occasion, and of what is expected of you as a speaker. What the audience may expect and what you can actually do are not necessarily the same thing. You should take that into consideration. Whatever your abilities, give the audience the best you are capable of in terms of the subject and the occasion.

Here are some of the questions the speaker ought to ask himself about his audience and the occasion when he is selecting a topic:

a. What will be the *sex* of my audience? Male? Female? Mixed? This can make a lot of difference!

b. What will be the *age-range* of the group? Ten to thirty years? Forty to fifty years? All teen-agers? Draftees? Old-age pensioners? All ages?

c. What will be the *educational level?* Illiterate? Grammar school? High school? College? Professional? Mixed?

d. Will the group be composed of *married* or of *single* people? Mixed?

e. What will be the *occupational areas* of the audience? Unskilled laborers? Clerical workers? Farmers? Executives? Machinists? Military men? Lawyers? Teachers? Mixed?

f. What will be the *economic level?* Less than $2000 income a year? Less than $4000? Less than $8000? Less than $15,000? Less than $25,000? Mixed?

g. What will be the *religious preferences* of the group? Catholic? Protestant? Jewish? Moslem? Taoist? Agnostic? Atheist? Mixed?

h. What will be the *political preferences?* Republican? Democrat? Socialist? Vegetarian? Liberal? Free trade? Mixed?

i. Will the audience be entirely *Americans?* British? Germans? French? Chinese? Mixed?

j. What *other common interests* will the group have? Clubs? Lodges? Hobbies? Basic human desires?

k. What will they *know about me* as a man and as a speaker?

l. What will they *expect of me?* Are they looking forward to me, or to my speech?

m. What *subjects* would be *most interesting* to the group, now that I have analyzed them?

n. What *recent events* have generated discussion and controversy among people who are like the potential audience?

o. What, if any, is the *special occasion* for the speech? Holiday? Unusual event? Providing needed information? Launching a campaign? Providing after-dinner entertainment?

p. *Where will the speech be given?* Picnic? Formal dinner? Political rally in a huge auditorium? Church service? Congress?

q. What will be the probable *attitude, mood,* and *preparation* of the audience? Friendly? Indifferent? Hostile? Prejudiced? Open-minded? In high spirits? Depressed? Serious? Informed? Uninformed?

3. GATHERING SPEECH MATERIALS: When the speech topic has been chosen, the speaker must begin to collect the materials for his talk. Unless he is able to draw upon personal experiences or a lively and *accurate* memory, he probably does not have much raw material with which to build his speech.

   Only a census taker or a clairvoyant could hope to have accurate, complete answers to all the foregoing questions. Obviously, a thorough analysis of the audience would be not only impossible but also a waste of valuable time. But the speaker can use the audience analysis in a general way.

   When he has some idea of what the audience and the occasion demand, the speaker must then decide how he can fulfill those requirements. He should be aware that his best chance of success lies in treating a topic with which he is already familiar or one with which he can become familiar through research.

   "Africa" as a subject is far too broad, however, even for the man who has just returned from a long visit there. Many men have spent a lifetime studying the Dark Continent without becoming expert on more than a small portion of the possible information concerning it. Narrowing down the field, "Folk Dances of the Watusi" is an African topic that is much more reasonable, but even this would be too involved for a ten-minute talk.

   In planning his speech, the speaker should consider not only the time limitations on covering the topic, but also the period available to him for doing his research. The man with practical experience in Africa will need much less time than the man who must make a trip to the public library and read up on it.

   At this stage in preparation, it is dangerous for the speaker to commit himself irrevocably to a tiny segment of the general subject area, or to a strong positive or negative attitude. It is vital for him to keep an open mind, so that he will not, either on purpose or by accident, overlook important materials which might dictate fundamental changes in the structure, purpose, or conclusions of his talk. Ideally, in this second phase of preparation, the speaker has selected a subject and defined an area of it for closer investigation. For speeches drawn entirely from personal experience, these cautions may not apply, but most talks require some degree of research. Research, to be effective, requires an open mind.

The wide range of published material in general and specialized fields should give today's speaker much assistance in gathering more than enough material for a strong, factual speech. Newspapers, magazines, reportage, biographies, and official reports provide a never-ending flow of information and opinion. The services of radio and television are invaluable. Dictionaries, encyclopedias, almanacs, atlases, statistical compilations—such as the census reports, bibliographies, maps, and charts—put facts, figures, definitions, and explanations at the fingertips of the thorough speech writer.[1]

It is important to know the *source level* of the material being used, however. Not all writers are equally accurate or reputable, nor are some writers able to observe and record as competently as others. A brief discussion of levels may help to clarify this.

a. Primary Sources: These are the sources of information commonly called "firsthand." Any personal experiences qualify. So do the experiences, opinions, explanations, and observations of authorities the speaker may personally interview. Original documents, such as the Declaration of Independence; original objects, such as the Pyramid of Cheops; original measurements, such as the speaker's own daily weather charts—all qualify as primary sources for a speech.

b. Secondary Sources: These are the reports made by people who have had contact with the primary sources: a newspaper interview with the Prime Minister of England, a biography of Madame Curie, a list of temperature readings read on the radio, a photograph of the Rosetta Stone, a drawing of a court-room trial, or Caruso phonograph records —all "secondhand."

c. Tertiary Sources: Books, articles, broadcasts, or speeches which digest or interpret the secondary reports of primary events are all tertiary.

Obviously, primary sources, when they can be obtained, will have much more validity and vitality in supporting a speech. Consider how much more effective a talk on Napoleon's last battle would be, could you have been at Waterloo. Unfortunately, you probably were not there. To gain information, you may find a digest history in some refer-

[1] Robert W. Murphey, *How and Where to Look It Up*, McGraw-Hill Book Company, Inc., New York, 1958, provides a descriptive bibliography of numerous reference works and other "standard sources of information."

ence work. Be careful! Owing to the source-level problem, here is what could happen.

Anxious to add color and interest, the speaker quotes a remark which his source claims was made by Wellington at Waterloo. Actually, Wellington said no such thing, because the primary source is eight times removed. (1) Wellington utters a rather spicy comment on the courage and ancestry of his opponents in the field. (2) His aide-de-camp vulgarizes the remark and passes it on to a lieutenant. (3) The lieutenant cleans the language up a bit and includes the remark in a report to the War Office. (4) The War Office edits Wellington's alleged comment and releases it to the newspapers. (5) The newspapers publish the remark, almost certainly with improvements. (6) Years later, a historian digs the newspaper report out of its paper tomb and reworks the remark for his new history book. (7) Even more years later, another historian "borrows" Wellington's comment from the first history book and dresses it up for his new book. (8) The Historical Reference Editor lifts the comment from the history book and "digests" it into a two-page survey of the "History of Western Civilization," for inclusion in an economy-sized edition of an encyclopedia.

The risks of using such sources are seldom this exaggerated, but a speaker should beware of the dangers of using sources far removed from the primary one. As much as possible, stay with primary and secondary sources.

d. How to Locate Good Source Material: The easiest way to solve the problem of finding authoritative reports and documented facts is to ask the research librarian of any good library to assist you. Such a person is highly trained in reference work and usually regards the search for sources as a real challenge.

In doing your own research, you may draw upon some of the following: (1) Library card catalogue—contains author, title, and subject listings. (2) Periodical indexes, such as the *Reader's Guide to Periodical Literature*—contain concise listings under author, title, and a variety of subjects of articles appearing in leading magazines. (3) *New York Times Index*—contains listing of all news items and articles published since 1913, making it invaluable for validating dates and facts. (4) Special indexes, such as the *Biography Index*, the *Education Index*, and the *Index to Legal Periodicals*—contain author, title, and subject listings of books published in related fields. (5) Bibliographies, such as the

Bibliography of North American Geology—contain listings of books, pamphlets, and articles in a variety of fields. (6) *World Almanac* and *Whitaker's Almanack* (British)—contain accurate statistical information. (7) Biographical dictionaries, such as *Who's Who* and the *Dictionary of National Biography*—contain authenticated information on various men of note. (8) Special encyclopedias, such as Spiller, Thorpe, Johnson, and Canby's *Literary History of the United States*[2]—material on a wide range of topics from plumbing to jazz may be found. When using some of these books, however, the speaker should be careful to verify the accuracy and dependability of the source. Unfortunately, many so-called "encyclopedias" merely collect opinion, error, and misconceptions of long standing. Competent research librarians can help speakers to find good standard works.

Rare indeed is the man whose memory is so faultless that he can remember everything he reads. In gathering material, such a gift of memory would be more a curse than a blessing, for the speaker does not want to remember everything. He will take careful, accurate notes on material which seems directly related to his general topic. In taking notes, he will attempt to "brief," or condense, the material to save both time and space. Techniques for this process are treated in detail in Section 3 on Written and Oral Briefing Techniques. To speed the organization of the materials, it will be most effective to put distinct bodies of information on separate cards or small sheets of paper. Then the materials can be organized and reshuffled or omitted as the needs of the speech dictate.

In taking notes, the speaker will have to be wary of the primary sources, as well as the secondary and tertiary ones. Primary sources can sometimes be even more misleading than the others. Some good tests of evidence and reasoning are given in Section 4 on Conference Techniques. They apply equally well in speech research.[3]

The reasons for fallibility in primary sources are various. Conscious or unconscious desires often cause a source to yield false or distorted information and opinion. Even in this best-of-all-possible-worlds, officials are not above warping the facts to fit their desires and ambitions. Watch for evidences of prejudice or special interest at work. Material

[2] Robert E. Spiller (ed.), and others, *Literary History of the United States,* The Macmillan Company, New York, 1953.

[3] Valuable guidance in the techniques of scholarly research may be found in Jacques Barzun and Henry F. Graff, *The Modern Researcher,* Harcourt, Brace and Company, New York, 1956.

so colored is always suspect. Read widely. Question liberally. Provide a variety of sources to build the speech upon. Differences of fact or opinion, resulting from deliberate or unintentional errors in reporting or reasoning, will thus become more apparent. You will be able to evaluate the sources more accurately and, as a result, give a more soundly based speech. Your own authority and knowledge of the subject will be greatly increased as well.

4. ORGANIZING SPEECH MATERIALS: When you have finished your research, you will find, if you have done a good job, that you have much more material than you need. This is good. It would be awkward to have insufficient material and have to "pad out" your remarks. Now the problem is to tailor your material into an effective speech which will fit your abilities, reflect your convictions, and meet the needs of the audience and the occasion.

Here are some useful steps to follow in achieving these goals.

a. <u>Stating the Thesis</u>: You have already chosen a subject area. You have narrowed this down to one aspect of the problem which you could treat effectively in the time alloted. You have refrained from making any prejudgments on the topic. By now, you have read and discussed the subject sufficiently to enable you to draw some tentative or even definite conclusions. If you had read, for instance, seeking information on price supports for farm crops, you might have decided now that the supports should be (1) abandoned, (2) continued, (3) reduced, (4) increased, or (5) removed from some crops and added to others. If any one of these convictions emerges, you have a good *thesis sentence* around which you can organize your materials.

Every good speech has a thesis or purpose sentence which, in the preparation, helps the speaker to keep firmly in mind exactly what point of view, idea, or information he is trying to communicate. This sentence, effectively stated, also helps the audience to keep the purpose of the talk clearly in mind. The initial phrasing of this sentence, which is really the core of the speech, should come first from the honest conviction of the speaker, growing out of his careful research and thinking. The speaker who masks his true beliefs merely to please the crowd cheats his audience badly, but he cheats himself more.

b. <u>Studying the Desired Result of the Speech</u>: When the speaker has decided what stand he must take on his topic, if any definite point of

view seems required, he must again study his audience and the occasion to see what results he can hope to achieve.

If his talk is built around the thesis sentence, "England is a potential danger to America," and his audience is to be composed of people who have never forgiven the English for burning the White House in the War of 1812, his thesis will probably be ideal for achieving audience interest, agreement, and support. On the other hand, if the audience is composed of members of the English-Speaking Union, he may have a small riot to contend with before he is through, if he is even allowed to finish. In the latter case, he will have to moderate his conviction and his statement of the thesis, rearranging his material in such a way that his audience can be gradually led, through the accumulation of convincing evidence, to the conclusion that England might represent a danger to America, if that is what the speaker desires to prove. He does not have to abandon his belief or his subject, provided he is clever enough to rework the material so that it is not offensive to the audience. It is extremely unwise to antagonize audiences deliberately, or to urge ideas and actions directly counter to what they believe in and cherish, if favorable audience reaction is desired.

Incidentally, though the sample thesis given above is ridiculous at the present time, it is still occasionally presented to American audiences.

c. Gauging the Audience: In phrasing the thesis sentence and arranging the speech materials to achieve the desired result, the speaker must be prepared to deal with three main kinds of audience. He cannot always be sure what kind of audience will be waiting for him, but if his preliminary analysis was careful, he should have a fairly accurate estimate.

Three general types of audiences exist, with combinations of the three.

(1) The Friendly Audience: This group is *with* the speaker and usually with his topic. It is more than prepared to give him a fair hearing. With this group, the speaker should use opening material which establishes his friendly feeling toward the audience, his sincerity and honesty and his interest in his subject. If he does this well, he should achieve success merely by stating his thesis and temperately developing his arguments. Certainly he should not take advantage

FIGURE 1–2. A Madison Square Garden audience waits for Billy Graham to speak. This is a volitional speaking situation on a giant scale. The Reverend Graham brings his message to immense audiences containing widely varied interests, faiths, abilities, races, occupations. With skillful analysis of the audience, the evangelist achieves remarkable results. (Photo by Marvin Lichtner. Courtesy of U.S. Features.)

of audience good will by haranguing the group with rash and offensive phrases.

If the group is 100 per cent with the speaker, as in many political rallies, he might even be able to achieve success by reciting nonsense syllables. Certainly anything he says will be favorably received.

(2) The Indifferent Audience: This group will listen, if the speaker pleases it with either his personality or his talk, or both. But he will have to work to get the group's attention and good will. Here, if the speaker is uncertain of the reception of the thesis he has chosen,

he will do well to devote his first efforts to turning the audience into a friendly group through such devices as identifying himself with them, making them laugh, or flattering them. Even then, in a persuasive talk, he might find it advisable to "soft-pedal" his strongest statement of the thesis until he is sure that the audience is beginning to agree with or at least follow his arguments. This might require a very weak statement of thesis in the introduction of the speech, with a strong statement in closing, presuming that agreement has been won during the discussion with especially convincing arguments.

(3) The Hostile Audience: This forbidding group is prepared to be displeased. Occasionally, it may even be prepared to do violence to the speaker. It may be that the speaker or the announced topic has annoyed them. Whatever the cause, if they don't like the man, they will find it difficult to like his subject. If they don't like his topic, they will find it awkward to like the man. They will probably give no quarter.

The speaker has to apply the same pacifiers he would use on an indifferent audience, but he will have to intensify the application. This is one of those times when great personal charm can do more than any amount of logical, well-supported discussion. If the speaker is successful in persuading the group that he is really a pretty good fellow after all, they *may* be willing to give him a hearing—but only a hearing.

If he has got this far, the clever speaker will omit a statement of thesis and reshape his persuasive talk into a strictly "informational" speech. As he leads his audience subtly over his arguments, they may, even against their wills, find themselves being persuaded. The finest thing one can hope for in such a situation is that the audience will evaluate the offered evidence and arrive at the same conclusions the speaker has already arrived at, without the speaker's having to state the conclusion in so many words. Here, the results of the speech would not be immediately apparent. A speaker might even feel he had failed. Actually, the speech would still be active in the minds of the audience, and it could be a matter of hours, days, weeks, or even months before conviction that the speaker was "right" would occur. There is, of course, no guaranty that such conviction would *necessarily* occur.

d. Selecting Materials for Inclusion: Given your time limit, your statement of thesis, your audience, and your occasion, you must now pick from your large stock of materials those which make good introductory items: attention-getting stories, quotations, statistics, necessary background information, definitions, statements showing the importance of the subject, and evidences of your broad research.

Because the introduction must be both *short* and *effective,* only the best materials should be used. The introduction is your opportunity to sell yourself and your topic to the audience. If the subject does not sound interesting, or if you do not seem qualified or prepared to discuss it, the audience may pay little attention to the rest of the talk.

For the discussion portion of your speech, in which you will explore, demonstrate, or prove your thesis, it is good to select three main points which seem to be the most important aspects of the subject. If the speech is purely to inform, the points might be the most vital things one should know about the subject. If the speech is designed to persuade or move the audience to action, the three points could be the three most powerful arguments in support of your thesis.

To develop and support these main divisions of the discussion, you should assemble the most vivid, precise, and illustrative evidence you have collected. Abstractions are largely wasted here, because audiences think in terms of images and specific examples. A moving description of *one* cow dying of thirst in a parched pastureland can have more real power to move and convince an audience than pages of statistics on cattle losses during droughts will have.

Be careful to have a variety of kinds of evidence. Don't depend entirely on quotations, statistics, or illustrations. Discard less important items or overly detailed material, as well as interesting but not closely related evidence. All material which does not directly support the thesis must be omitted. Only the passengers who can pay their fares can ride this train.

e. Outlining the Speech: With the exception of formal policy speeches, good speeches are not written out as if they were essays or editorials, nor are they memorized, word for word.

Wise speakers find it saves time and helps presentation if they outline their speeches, instead. The outline contains all the essential information, correctly organized and structured, so that the speaker can

see at a glance just what comes next or what should receive most stress. If the speaker finds he is running short of time, he can easily omit minor supporting points or illustrations with no apparent damage to the structural development of his general argument. The audience will usually not notice that anything has been left out. If, on the other hand, the speech had been written in essay form, it would have been almost impossible to cut anything out without harming the entire composition and leaving a glaring break in the thought that even the dullest audience could not overlook.

Because the speaker's best means of winning an audience is to seem sincere and natural in his discussion, the outline becomes an essential to speech success. Creating the impression that one is sincere and natural can best be done by *being* sincere and natural. With a speech outline fixed firmly in mind, the speaker is able to phrase his already well-organized thoughts as "extemporaneous" remarks, picking and choosing the words as they are needed. The unnatural and insincere quality of most essay-type speeches, whether they are read or delivered from memory, is familiar to everyone.

The essay is a literary form. A speech is, or should be, "amplified conversation." The choice of words, style, and sentence length, for example, in essays differs significantly from that in conversation, though the essay is moving more and more toward the conversational style. Even if one has turned out a well-written essay, the average memorized rendition of it, with the sweating speaker straining to reproduce each phrase exactly as written, gives the impression of an uninspired reading from a monthly magazine, played on a lo-fidelity phonograph. Memorized speeches are usually agony to hear. Even worse, they are agony to deliver.

Outlining avoids this potential speech disaster. The structure of the outline is illustrated in Section 3. Here it is sufficient to say that speech outlines are divided into an introduction, which prepares the audience to hear the talk; a discussion, which explains or defends the thesis with fact and interpretation; and a conclusion, which is used to summarize the main points of the discussion and make an appeal to the audience to think or do as the speaker has urged.

The treatment of outlining in Section 3 is equally applicable to the problems of making general speech outlines and specific briefings. In an average speech situation, however, the introduction may require much more showmanship than in a professional briefing. Speakers

should also remember that different audiences may require different rhetoric. That is, the basic outline may remain the same, but the way in which the discussion is presented, the style, will vary. The Mud River Valley Horse Breeders' Association will need and expect a different conversational style than the Squeehasset Chapter, DAR, will require.

f. Writing the Speech: If an extemporaneous speech is usually natural and sincere, it might well follow that a written speech is usually not. And that is frequently true, but it need not be so.

The only defensible reason for writing out a speech as an essay, rather than making an outline, is that the speech is to contain important statements of belief, fact, policy, or interpretation which must be given precise wording. Messages of presidents and other important government officials are excellent examples of this genre of speech writing. All too often, such speeches are deadly, ponderous affairs, more boring to hear than they are to read. At least a reader can skip through the tedious portions. The listener has to go at the speaker's pace.

In making statements of policy, officials may have to work for days before an effective formula or method for expressing the new belief or plan of action can be found. When it is finally crystallized, too much depends upon this exact statement to take the chance that the speaker chosen to announce the new edict may forget or change the wording. In extemporizing, the speaker might badly distort or destroy the original meaning.

Important addresses are often prepared well in advance so that the press may receive early copies. This means that the papers can be in the streets with the complete text of the address immediately after it has been given—in some cases, even before. This is necessary because the address may have real economic or social importance to large groups of people. Farmers, lawyers, teachers, laborers, office workers, and executives will be searching the text, possibly trying to find meanings within meanings, to read between the lines, or just to make sense out of it.

When an important person departs from the text of a prepared address, it can cause consternation and havoc. He may, with the best intentions, note his own misgivings on the policy he has been called upon to announce, thereby seriously damaging the effect of the new

measure or the prestige of the agency or group he represents. He may also be the possessor of some unfashionable prejudices. If he decides to speak "off-the-cuff," he may antagonize a large portion of his audience by referring to a racial, religious, national, or occupational group in unflattering terms. It is said of some national figures, that their co-workers prayed each time they spoke that they would read their speeches as written and not add any personal touches.

One of the great disadvantages of the prepared address is that it usually must be read. Few important speakers have the time or the ability to commit lengthy, complex speeches to memory and reproduce them accurately.

The ability to read aloud with feeling, sincerity, and naturalness is given to few, even among professional actors. It is a skill which can be learned, just as public speaking can be learned, but there has been no noticeable stampede by public figures to achieve this useful ability. As a result of this deficiency, the listening audience, in homes and auditoriums all over the land, is regularly put to sleep by readings of soporific, though important, material.

If the speaker finds he *must* write out the exact text of his talk, then, for the sake of his long-suffering audience, let him try to write it in as lively and conversational a vein as possible. He must remember he is not writing an essay or an editorial. He is writing a *speech* which is to be delivered to people. When the time has come to bring this speech—or Frankenstein's monster as the case may be—to life, let the speaker practice reading it beforehand, so he can at least make the pretense of giving it with conviction and sincerity. When a speaker stumbles over his words in reading a talk, the obvious impression on the audience is that the thoughts are not his, that he did not write the speech and has never seen the text of it before he walked out on the platform. This impression should be avoided.

B. SPEECH PRESENTATION: This might be considered the most important aspect of speechmaking because, if the communication fails the speech fails, no matter how excellent the preparation may have been. Too many speakers think their job is finished when they have typed an outline or an essay. They think they can then proceed to read from large sheets of paper, in a tone more suited to reading recipes on a TV homemaking show, and have the audience go wild with enthusiasm over their speeches. The audience is under no obligation to the speaker, other than

that of showing courtesy, if they have invited him to speak. They do not have to like him; they are not required to like his subject; they do not have to listen to him; they need not give him any encouragement. It is the speaker, and the speaker alone, who must, by good psychology, get the audience to like him, his subject, and his treatment of it. There are three groups of aids available to the speaker in achieving these goals. The first is psychological; the second and third are physical aids.

1. THE NEED TO SPEAK: Just as the speaker has to have a reason before he can begin working on the content of his speech, so he must also have a need to deliver this talk to his audience. If he does not really desire to communicate his subject to the group, that fact will be painfully obvious. Bound up in the need to speak are the speaker's interest in the subject, his conviction that his thesis is correct and defensible, his strong belief that the speech must be heard by his audience, and his willingness to engage in public speaking situations. If any of these elements is seriously weak or entirely lacking, the speaker may not yet have a real, positive need to speak. If he does have these necessary drives, they will be important aids to attaining sincerity and naturalness in delivery.

2. VOICE: The importance of effective use of the voice should not need explanation. What does require review is how the voice can be used to achieve the greatest effectiveness with any given speech.

   Good speaking has often been called "amplified conversation." That means that the speaker talks to a large group in a sincere and natural manner, just as he might to one or two people in his own home. His talk, however, will be more controlled and directed than daily conversation, which is often aimless and repetitive. In speaking, he will try to retain the pleasant, easy cadences of normal speech, rather than adopt the ringing oratorical style which should have gone out with Bryan. The speaker's object, after all, is not to make the stones cry, but to convince people who are like himself.

   To achieve this desired naturalness of manner—and many people lack it in ordinary conversation—the speaker must be skilled in the following voice disciplines.

   a. Energy, or Force: Nothing is more disappointing to an audience than to watch a speaker say something apparently exciting or profoundly moving, without being able to hear a word he is saying. Good

speakers must be able to generate enough energy, without shouting, so that they can be heard in meeting rooms and smaller auditoriums without benefit of public address systems. Huge amphitheatres and the "Cow Palace" type of auditoriums require artificial sound amplification, but many smaller gathering places do not. Frequently, though, it becomes necessary to equip even small rooms with microphones because the advent of electronic speaking aids has encouraged not only crooners but also a small army of "whisperers." These people are lost without a microphone. Speakers should not depend on such aids, because they are not always available or in working condition. At such times, the speaker has two choices left to him. Either he speaks loudly enough for the audience to hear him, or the speech is canceled.

Rather than depend on artificial amplifying systems, a speaker should develop good "deep," or diaphragmatic, breathing. This will give him vocal power without strain and a reservoir of energy, as well.

FIGURE 1–3. The measured, well-modulated tones of newsman Edward R. Murrow have become an American by-word for thoughtful, honest reporting. Speakers who wish to improve their rate of speaking and voice control will find Murrow a good model to follow. (Courtesy of CBS–Television.)

He will be able to deliver phrases, sentences, and groups of sentences clearly and audibly, without having to gulp for air every other word. Good control of the diaphragm will also enable him to have effective variations of force. There are times when softness is a virtue, and other times when a voice should thunder. Most often, it should be pleasantly audible, without sounding as if the speaker were straining to be heard.

If possible, speakers should try out the auditorium or room before the speech is to be given in order to see how well their voices carry and what improvements may be needed. It should be remembered that empty rooms require less volume than full rooms, where the multiplied noises of breathing, moving, and mumbling of the audience provide formidable competition, not to mention the acoustical muffling caused by the additional bodies and clothing.

A frequent misconception among untrained speakers is that effective use of vocal force is the same thing as shouting. This is not so. Correct breath control, coupled with skillful *projection* of the sounds, can enable a speaker to be clearly heard without vocal strain even in large auditoriums. The same principle applies to singers. It is both possible and desirable, for instance, for an opera singer to fill the opera house with beautiful sounds, without using a microphone and without shouting or screeching. That singers do not always succeed in doing so is unfortunate.

Breath control and projection require extensive practice. The speaker who feels he needs to develop those twin skills should consult one of the basic speech texts listed in the Appendix for a thorough explanation and sets of drills.

b. Quality: The speaker's voice should not only be audible, it should also be pleasant to hear. If the voice is nasal, thin, breathy, harsh, hoarse, or falsetto, listening becomes a most unpleasant ordeal. True, some of these conditions may be the result of defects in the vocal mechanism which only medical attention can correct, but more often they are caused by incorrect use of the breathing, voice-producing, or resonating mechanisms.

(1) Nasal: Three kinds of nasal difficulty commonly impair voice quality. Most frequently heard is the "cold-in-the-nose" type, which is really a lack of nasal resonance. For good vocal quality, it is necessary that the nasal cavities help amplify and enrich the tone. Words which contain "m," "n," or "ng" sounds particularly need this

resonance to produce an accurate sound. When the nasal cavities are blocked, as they are when one has a severe cold or sinus trouble, quality suffers. To cure this, the cold or the sinus trouble must first be cured.

Another variety is cul-de-sac resonance. Part of the vocal stream is deflected into the nasal cavities, where it resonates, but its passage is partially blocked. If the blockage is caused by bone or tissue obstructions, medical attention will be necessary to remedy it. Occasionally, the defect may be a learned process, gained by imitating another person who speaks this way. Such cases can be corrected by practice in correct breathing, resonance, and sound formation.

The third type, an excess of nasal resonance is best illustrated by the late Fred Allen's celebrated voice. Too large a body of air is deflected through the nose, robbing the speech sounds of distinctness and balanced quality. The same corrective measures given in the preceding paragraph will prove effective.

(2) Thin: Thin voices lack body, richness, and carrying power. They may seem too high-pitched, but usually it is the lack of resonance in oral, throat, and nasal cavities that makes this seem so. To improve the quality, special work on resonance should be done, coupled with deep breathing and projection exercises.

(3) Breathy: A whisper or rush or air seems to accompany the breathy, or aspirate, voice. The vocal folds are not operating properly; they are allowing extra, unvocalized air to escape with the vocalized. Correction begins with breath control and sound production. The person who wishes to overcome a breathy voice will have to drill to reeducate the vocal folds to function effectively. When this has been mastered, no unvocalized air should escape during sound production.

(4) Harsh: The direct cause of harshness or gutturalness is excessive strain or constriction in the throat. A number of factors, physical and/or mental, may be responsible for the tension. The important thing for the speaker to do is to relax the throat—and the whole body, as well—to encourage free, natural vibration of the vocal folds. Work on breathing and voice projection is also indicated.

(5) Hoarse: Possibly, a hoarse-voiced speaker is trying to sound more masculine, more authoritative, by forcing himself to speak in a

deeper pitch than is normal or right for him. He may also be straining to produce sound when the mechanism is already fatigued and irritated. When hoarseness exists, there is a danger that temporary or even permanent damage may be done to the voice. Medical attention is advisable, and the voice should certainly not be subjected to further aggravation in speaking while this condition persists.

(6) Falsetto: The high, squeaky falsetto is often used by comics as a source of humor, but there is nothing funny about it to the serious speaker who is cursed with such a voice. It is usually a source of acute personal embarrassment to him; and if it does not cause the audience to laugh or smile, it may irritate them or move them to pity. None of these reactions is desirable.

Falsetto often results from an unsatisfactory adjustment to vocal changes in adolescence. At that time, the vocal folds, particularly in the male, lengthen and thicken, giving the voice the deeper, more mature quality associated with adult voices. In some cases, the adolescent resists the change and continues to use the limited upper-pitch range of the child, even though the voice is capable of lower pitch and greater variety. Boy sopranos occasionally seek to preserve the childish quality for professional reasons. Other adolescents, shamed by the breaking of their voices during puberty changes, keep the falsetto. Such action is obviously harmful to the vocal folds because of the great strain which must be put on them to use the higher pitch.

Unfortunately, even though the man with a falsetto voice has normal vocal folds, his years of habituation to the falsetto have prevented him from learning how to use the entire length of the vocal folds. The cure, plainly, is to learn to use the complete range available, but much retraining is needed to make up for the adjustment that should have been made during adolescence.

c. Pitch: A speaker should normally speak at a pitch or tone level which is natural for him without tightness or straining in the throat muscles. If he is trying to force his voice several tones lower than normal, he may make himself ridiculous and also run the risk of injuring his vocal folds. In normal conversation, one's pitch varies slightly above and below a personal standard tone level, or *optimum pitch.* This pitch level is the one at which sound can be produced with the least amount of strain on the vocal mechanism. Variations from it may be either voluntary or involuntary. For emphasis, one may raise

or lower his pitch. Extremes of emotion also cause interesting variations. In anger, one may find his pitch rising, sometimes quite high. If tired, one may find his pitch level falling, reflecting the fatigue he feels. Pitch is determined by the number of times per second the vocal folds vibrate. The fewer the number of vibrations, the lower the pitch. As energy decreases, the pitch tends to fall.

To make the best use of the additional color and naturalness which pitch variations can give, one should simply feel the emotions and thoughts in a speech, as they are spoken. Unless one is an experienced actor, a false, or assumed emotion will be immediately noticeable. The speaker must get himself involved emotionally in his speech, even if he is giving it for the hundredth time.

d. Articulation and Pronunciation: The necessity for forming individual sounds correctly and clearly should be plain to all. So should the need for correct pronunciation. If a word is not clearly articulated, or is incorrectly pronounced, the audience may mistake it for a different word, or may not understand it at all. Misplacement of stress on the syllables of a word or unfortunate mistakes in pronunciation often have a disastrous effect on speeches. Such errors may prove vastly amusing to an audience, but the speaker will lose the audience's respect and possibly its interest. The group may redirect its attention to hunting for more mistakes in the speech rather than absorbing its content. When in doubt about the correct pronunciation of a word, consult a good dictionary. Practice speaking with a tape or wire recorder to check your articulation and pronunciation. You may have been slurring sounds, mispronouncing words without being conscious of it.

e. Tempo, or Rate: In normal conversation, the tempo of speaking varies from person to person. Some people speak excessively slowly; others talk so rapidly that it is difficult to understand them. To communicate, one should never speak so quickly that the words cannot be heard distinctly *and* understood, or so slowly that listeners lose the thread of the idea.

A measured, vital rate of speaking, such as is used by good radio and television commentators would be a satisfactory standard. Conversation does not always proceed at the same tempo, however, and neither should formal speaking. When one is thoughtful, one tends to reduce one's rate of speaking. When excited, one tends to increase the rate, sometimes so much so that the speech becomes unintelligible.

To make the most of the tempo variations available to him, the speaker should feel and think what he is saying as he says it.

f. Pause: Closely related to tempo, the pause can be extremely effective. The speaker who knows how to use pauses actually is a man who knows when to stop speaking. Pauses can do a variety of things for a speech. The speaker may pause to let an audience digest what he has just said. He may pause dramatically before making a startling statement. Pauses may be used to indicate that he is thinking the problem out as he goes along—even if he already has done the thinking at home. Comic effects can be gained by using the pause. Here is a rather weak example: "I am glad to see you are all well—over twenty-one years of age." Effective use of pause will help to emphasize main points, dramatize transitions, or distinguish groups of items for the audience. Too often, a pauseless speech runs all the ideas together so that no points stand out distinctly. The pause can also be a device to help the audience remember important ideas. A good pause gives them a chance to register the information or thought before proceeding to new ideas.

3. BODY. Though the voice is most important in conveying the content of the speech, the body is not to be ignored. It can do much to support the voice, or it can sabotage what the voice is trying to achieve. Personal appearance, posture, body movement, and gesture are the main points to be considered.

a. Personal Appearance: A good speaker does not need to be a fashion plate, but he should be neatly, cleanly, and appropriately dressed for the occasion. Where formal dress is prescribed or a uniform is to be worn, he need only attend to the details of fitting, cleaning, and pressing. When suits, sport clothes, or even work clothes are to be worn, the problem becomes more complicated. Here, the guiding rule might be to dress the way the audience will dress but be careful to look your best. It would be ridiculous to wear a tuxedo while speaking to a gathering garbed in sport shirts and slacks. Such marked differences create an unfavorable barrier between speaker and group.

On special occasions, unusual costumes or distinctive national garb may be indicated. Ordinarily, though, the speaker should avoid garish patterns, unusual tailoring, loud colors, and bizarre materials. This is particularly important for women speakers, who often deck themselves out like Christmas trees. If the clothing is subdued in color and in cut, then the audience can focus more attention on the speaker's face and

gesture. The speaker wants his audience to regard him as a speaker, not as a suit of clothes. Anything in appearance which distracts attention from the speech, either because of its excellence or its shoddiness, should be avoided.

b. Posture: Most people will insist that it is not difficult to stand up or sit down. They do it all the time, they will say. And, yet, to do either of these things gracefully for any length of time requires skill and discipline, at least if one is being observed by an audience.

Speakers must acquire both arts, for they are actually in the speaking situation from the time they leave their seats to begin speaking to the time they return. To help create the right mood and audience attitude for a speech, a speaker should go to the podium in such a way that the audience will be preparing itself for his opening remarks. That does not mean he will need to walk on his hands as a prelude to an entertaining after-dinner speech, but he will want his attitude and bearing to suggest what the dominant mood of his talk will be. The same is true of the closing portion of a speech, where it is especially desirable to preserve the mood. Too often the fine effect of the speech will be destroyed by an abrupt or even comical retreat to the speaker's seat.

While speaking, one should stand erectly and firmly on both feet, but without tension or stiffness. The speaker is relaxed, but not slumped. His arms fall naturally at his sides, unless he wishes to use them for some explanatory movement. When he becomes tired of standing in the same position, he takes a few steps to a new spot. If this movement is coupled with an important change in the thought of the speech, it will help emphasize the transition.

Good speakers aim for comfort and relaxation, balanced with vitality and control. They do not rest their hands, arms, or elbows on the podium. They do not lean on rostrums, tables, chairs, walls, or map racks. They do not use pointers as body props or canes. They do not stand spraddle-legged in a "Colossus of Rhodes" stance. They do not stand stiffly on one leg, with the other leg thrown out as a brace. Hands are not used as props or braces for a tired body either. The speaker cannot afford these slothful poses, for he has to keep his body free to move. Audiences want vital, alert speakers. If he needs rest or sleep, the speaker should get it before he comes to make his speech.

c. Body Movement: Movement is more than merely changing position to rest one's legs. As such, it is here distinguished from posture, which

may be considered the general bearing or carriage of the speaker's body. Movement is understood to be that *total bodily action* which helps a speaker to convey his emotional involvement in his subject. This movement is "total" in that most emotional states, though certain gestures of face and hands express them specifically, involve the whole human body. When a person is mad, he is mad all over; it does not show in just a facial grimace or in a quirk of his little finger. The nervous system sends impulses to the muscles causing tensions throughout the body during emotional states. Secretions are also released internally, to complete the totality of the reaction.

Surely here "actions speak louder than words." If the speaker says he is angry that children don't have good schools, but his body is relaxed, one may assume that his is an intellectual form of anger and doesn't really bother him much. One could also assume that the problem shouldn't bother anyone else, if the speaker himself is not so upset as he claims to be. Because emotional appeals have such power to convince, even over supposedly rational audiences, it behooves a speaker to practice making his body flexible enough to respond to these emotional needs.

Unfortunately for the speaker who would like to "practice," most total emotional reactions are uncontrollable. They are automatic; they *betray* rather than demonstrate what the speaker actually feels. To make them work for him, the speaker must really believe in and feel his material. If he is a skilled actor, of course, he will have studied the overall nature of emotional reactions so that he can duplicate them, but many actors achieve this also by feeling their way into the emotions.

Such covert, complete bodily reactions are particularly good because they do not call direct attention to themselves, as distinct, planned gestures may. These total reactions are part of a much larger picture, and they are, as such, more natural. The speaker's job is to make them work for him by setting them into action with emotional stimuli.

d. Gesture: Any deliberate movement of the body to convey information or aid in communication can be called *gesture*. Gestures range from pointing a finger or making a face to shrugging the shoulders or stamping a foot defiantly. The hands are most frequently thought of in association with gesture, and yet it is often the face which does most to convey the speaker's actual feelings.

There are a number of conventional hand gestures: pointing or indicating, describing, dividing, approving, rejecting, enumerating, emphasizing, appealing. They can be useful, for most audiences understand the symbolic meaning of these gestures, just as if they were a form of sign language. The difficulty is that a good gesture must be both natural and sincere. If a speaker uses a conventional gesture, without "making it his own," it may be inappropriate to the speech, to say nothing of being ridiculous for him to use. A small, shy, ineffective person is not going to make a good impression if he tries to pound his fist on the rostrum. He should find a gesture which will convey his feelings and yet be in keeping with his personality and physical make-up. Movements and gestures should grow naturally out of one's normal body activity in daily conversation. They can be enlarged or refined for formal speaking situations.

Some speakers will always use more gestures than others. Latin peoples, for instance, have a justly deserved fame for their ability to speak with their hands. What could be more cruel punishment than to tie a Frenchman's hands behind him and ask him to describe a beautiful girl?

There is such a thing as too much gesture. Excessive use of explanatory motions or facial contortions can be annoying. Too much random arm-waving and wild sawing of the air with the hands will distract even the most uncritical audience. These "windmill" tactics are completely unneeded, for the idle motions of the arms and hands serve no purpose either in communicating specific ideas or suggesting the speaker's emotions.

For some, gesture with any part of the body will forever be an annoyance. These are the speakers who are happiest with their hands in their pockets or behind their backs. If they never master fluent gesture to support their speeches, they should at least conquer their consuming desire to hide the hands by letting them hang naturally and comfortably at their sides. Experience and practice will help. Shyness is the root of the problem.

III. Conclusion

A. Review of principles of speech preparation and presentation.

1. Speech preparation has many variables which the would-be speaker must master.

a. Reasons for the Speech: There must be a reason for speaking: either the speaker has been asked—invitational, or he wants to speak —volitional.

b. Choosing a Topic: The speaker must choose a subject which is right for the audience, for the occasion, and for himself.

c. Gathering Materials: Soundly based speeches are built from wide reading in good sources, with careful testing of facts.

d. Organizing Materials: Using the outline form, the speaker will adapt his material to the needs of the audience and the occasion, whether his purpose be to entertain, inform, persuade, or move to action.

2. Speech presentation is crucial because the best-prepared speeches can be ruined by poor delivery.

a. Need to Speak: Sincerity and naturalness are achieved only when there is a real desire to speak on the subject.

b. Voice: Effective use of energy, quality, pitch, articulation and pronunciation, tempo, and pause must be mastered.

c. Body: Personal appearance, posture, body movement, and gesture are also important.

B. Speakers who feel the need for fuller discussion and specific drills on any of these points should consult the texts listed in the Appendix.

SECTION 2 Audio-Visual Aids for Speakers

PURPOSE: To discuss audio-visual aids adaptable to formal speech situations, indicating how they may be effectively used in briefings and conferences.

I. Introduction

A. DEFINITION OF AUDIO-VISUAL AIDS: Many people, if asked to give their idea of audio-visual aids, will say, "Oh, motion picures, TV, slides—you know, things like that." This popular concept does not begin to describe the variety of aids available to the resourceful speaker. Actually, motion pictures, combining sight and sound, usually are used alone, serving an independent function, but they may be used as audio-visual aids to supplement a speech, a briefing, or a teaching program. And many, many other aids are also available.

As popularly used, the term "audio-visual aids" includes those aids which are purely auditory, those which are purely visual, and those which are both auditory and visual. An *aid* may be said to be some stimulus, device, or technique which helps the speaker to get his ideas across to his audience. *Audial* aids achieve their effects through sound. The listeners hear the aid. *Visual* aids convey their content through sight. The listeners see the aid. Some aids, such as films, may combine the appeals of sight and sounds, and these are *audio-visual* in the strict sense of the term. In all cases, the aid must assist the speaker, not replace him. Too often, inexperienced speakers use devices which, owing to their novelty or complexity, take the audience's attention away from speech and speaker. When this occurs, the aid is no longer aiding; it is sabotaging the speaker.

A semanticist, looking at this definition of audio-visual aids, might insist that the speaker himself is an audio-visual aid. "The audience hears

him. They see him try to make his arguments more understandable, more emphatic by using gestures and facial expressions. If that's not an audio-visual aid by definition, then I'm no semanticist," he might say.

This reasoning is ingenious. It is also splitting extremely fine hairs. The speech, as delivered, may actually be called the vehicle of the speaker's ideas. The various aids that he uses can be considered as fuel improvements—ethyl gasoline—which increase the running effectiveness of the vehicle.

It is true that the way a speaker says things can aid or impede understanding of *what* he is trying to convey to his listeners. A discussion of the use of variations in pitch, tempo, force, and quality to improve communication of emotions and ideas is given in Section 1 under Voice.

Ordinarily, however, auditory aids are considered to be distinct from the speaker's normal delivery. They may be such things as an imitation by the speaker of a dialect, a recorded excerpt from a talk by the President, or an illustrative passage from a symphony. The speaker uses these aids because his listeners can gain much more accurate, vivid, and lasting impressions from the "real thing" than they could from involved explanations.Try, for example, to describe a Southern drawl for someone. Then let him hear it. From the description, he may have got a correct idea or he may have formed an entirely different notion. When he hears a drawl, he may not even recognize it by the description he was given, for unfortunately, words do not always communicate exact meanings between people.

If the speaker were to quote the President, he would run less risk of semantic confusion than is involved in trying to explain a particular Southern accent. But think how much more effective and convincing it would be if the audience could actually hear the President make the all-important statement and in its original context. When he is merely quoted, there may be reasonable doubt that the speaker is doing justice to his meaning. The quote could have been lifted out of context, thereby violently changing its meaning. Or the tone of delivery could have been changed from sincerity to sarcasm, thus altering the meaning and the intention.

The argument that visual aids must, by definition, include any body gestures the speaker employs to make his meaning clearer is basically justified. Use of body movement and gesture is reviewed in Section 1. For this discussion, however, visual aids are those objects separate from himself that a speaker may show to his audience in order to increase their understanding.

B. DISTINCTION BETWEEN SPEAKING AIDS AND INSTRUCTIONAL AIDS: Most of the articles and books concerning audio-visual aids are written by educators for the use of educators, whether the situation be one of youth education, military instruction, or commercial and industrial training programs. The wide range of aids adaptable to the teaching of concepts, facts, and skills are not all usable in formal speaking situations. All the aids which a speaker can use may also be used effectively by a teacher, but a speaker cannot use all the devices which may be employed in a classroom.

For an extreme example, cadavers are indispensable visual aids for medical students, and the embryo pilot can learn a great deal from working in the Link Trainer. But no speaker who wants to keep his audience's attention on his speech will dream of providing each member with a Link Trainer—or a cadaver.

Basically, the problem is one of different goals. The speaker may seek to inform or instruct his audience. He may want to convince them. He may want to move them to action. Or he may only try to entertain them. Whatever the aim of the speech, the attention of the audience should always be on the *speech* and the *speaker*. The speech is the most important thing. It must not be subordinated to the aids, no matter how colorful and intriguing they may be. If the aid is more effective and interesting than the speech, then perhaps the speech is unnecessary.

In educational situations, the teacher is not always a speaker, just as the speaker is not always a teacher. The speaker wants to achieve his goal through his speech. The teacher relies heavily on speech, but he also knows that certain types of training aid provide more vital learning experiences for the students than hours of mere lecturing. If a teacher is simply conveying information about history, he may limit himself to the kinds of audio-visual aids a speaker would use under the same circumstances. If, however, the teacher wants his students to *master* a technique or a body of information, he reaches a point of diminishing returns after he has repeated his lecture, with variations, several times. Now, it is time to resort to audio-visual devices which may give the students an opportunity to have a personal motor experience with the material to be learned. Here is where the cadavers and the Link Trainer come in. Such complex aids usually require detailed explanations and complete attention from the student. When this situation occurs, the teacher's speech is no longer the center of interest. The speech actually becomes only an *aid* to help the students to understand the use of training devices.

A good question to ask in selecting audio-visual aids for speeches is "Will this aid help me, or will I have to help it?"

C. WHAT AUDIO-VISUAL AIDS CAN DO FOR THE SPEAKER: Even though instructors have a wider range of audio-visual aids to choose from than other speakers do, the general purposes of the aids in formal speaking and in classroom instruction are the same. Weaver and Bollinger have listed four basic purposes of visual aids in their book, *Visual Aids.*[1] These can be rephrased and enlarged to fit audial aids as well.

1. Audio-visual aids attract audience attention.
2. They increase audience interest in the subject.
3. They enable a speaker to simplify complex material.
4. They help the audience to form correct sensory images.
5. They help the audience to understand relationships between concepts, facts, and objects.
6. They facilitate retention of information and images.

D. LIMITATION OF THE DISCUSSION: Conceivably, full consideration of a speaker's aids should include those stimuli which appeal to senses other than sight and hearing. The number of times, though, when a speaker will find odors, pressure sensations, heat and cold, taste, and touch useful in speaking are limited. Such sensory appeals are better adapted to instructional situations where each student can taste the sugar and the salt, each soldier can smell the tear gas, each doctor can feel the swelling, or each tailor can touch the tweed. Such aids are widely used in teaching, but they tend to distract the audience in a formal speaking situation. The inventive speaker, of course, will be able to adapt some of these sensory appeals to his talk.

This section is confined to consideration of audio-visual aids and their use. Detailed instructions for the construction of these aids may be found in the audio-visual texts listed in the Appendix.

Whether a speaker has to make his own aids or whether he is fortunate enough to have specialists to do the job for him, he must know *what* his aid is supposed to do and *how* it can be most effectively presented. If he does not know these two things, the most skilled craftsman in the world may not be able to build a good aid for him. If he does know the *what* and the *how,* he can probably improvise a usable aid. As will be shown, the value of the aids lies solely in their effect on the listeners, not in their elaborateness nor in the costliness of their construction.

[1] G. C. Weaver and E. W. Bollinger, *Visual Aids: Their Construction and Use,* D. Van Nostrand Company, Inc., Princeton, N.J., 1949, pp. 5–8.

II. Discussion of Audio-Visual Aids

A. AUDITORY AIDS FOR SPEAKERS:

1. USES OF SOUNDS: List the kinds of sounds or auditory devices you have heard speakers use, aside from the speech itself. Not a very long list, is it? There are at least two good reasons for this.

Making the speech is the speaker's job, right, or pleasure, depending upon his feelings about the particular speech in question. In any case, speakers are usually not anxious to encounter oral competition, whether it be from hecklers in the audience, more experienced orators on the platform, or from recordings. In addition to having audience attention diverted from the speech, the speaker may find that the other voice or sound is more pleasing to the audience than he is.

Another reason is that many auditory devices are excellent for classroom teaching but are not adaptable to formal speaking situations. Recordings of Morse code or of the Japanese language may be invaluable in teaching Morse code and Japanese, but they have limited value as speech aids, except as brief illustrations of how code and Japanese sound.

One could offer the difficulty of obtaining equipment for reproducing sound as a possible third reason for lack of auditory aids in speaking. But then, the same thing can be said about visual aids. They do not grow on trees. The speaker who wishes to make his speech more effective will have to exercise some ingenuity and exert some additional effort. The rewards in terms of audience understanding and response should more than justify the extra work.

Before considering specific auditory stimuli which can help a speech, it might be well to become more aware of how much sounds can do, even though they are not the actual speech vehicle. Consider the following scene:

> A gentle chirping of crickets is heard; a wind is sighing faintly; now and then, there is a creaking, as of tree limbs rubbing against each other; a frog croaks; there is a sudden splash of water and then quiet. In the silence can be heard the low, choking sobs of a young woman. There is a crackling of brush, as if trodden by heavy feet. The young woman gasps. A deep, pleasant voice exclaims passionately, "Lois!" There is a sound of heavy and light footsteps, followed by the sound of a kiss. The young woman whispers, "Rodney." Somewhere, far off, is heard the lonely whistle of a train.

If you were able to see this little scene in a theater as a play or a motion picture or at home on your TV set, you would have a very clear picture of the action. But if you could only hear this on your radio, what then? Probably, you would still have a fairly accurate, even vivid, picture of the action. And what makes this possible? The use of sound effects. Without the supporting sound effects, this is all the listener hears:

"Lois!"
"Rodney."

Auditory aids have helped by (1) creating mood or atmosphere, (2) adding realism, or (3) assisting in telling the story.

What sound can do for motion pictures, plays, and TV and radio broadcasts, it can also do for a speech, within limits. No one wants to turn a briefing or conference into a Western melodrama, complete with stampeding hoofs and pistol shots. Effective use calls for restraint and careful selection. Without making a sound track of mood music and forest murmurs as a sentimental speech background, a speaker can still get a few sounds to do amazing things for him.

a. Creating Mood or Atmosphere: An excellent way to capture audience attention and set the mood for the speech is to use an appropriate sound aid which can appeal to the audience's emotions more directly and effectively than tedious narration.

Suppose a speaker has selected "Dangers of Bad-Weather Driving" as his topic. After greeting the audience, he might, without explanation, play a short recording of a violent storm in which a speeding car can be heard to skid and crash. If anyone in the audience is getting sleepy, the aid should jolt him wide awake. Such an aid has the dual advantages of being a novelty and a curiosity-rouser. Few speakers have been adventurous enough to use such devices, so this is *new* to most audiences. In addition, the sound raises a number of questions in the minds of the audience. What did that crash mean? How does this tie in with the talk? The group's appetite should by now be whetted for an exciting and interesting talk.

This method of setting the mood can be used in a variety of ways. The speaker's inventiveness is the only limit. For example, battle noise recordings have been used to advantage to create atmosphere for talks on combat techniques. A speaker who has chosen "The Good Old Days Down on the Farm" as his topic might regale his audience with

a few selected barnyard noises, both as an introduction to those listeners who are confirmed city-dwellers and as a refresher for those who are farm-born and -bred.

Sound effects can be used as novel illustrations also. If a speaker wishes to convince an audience that they should "Put Idle Money to Work," he might reproduce a few healthy snores, explaining that the snores are the noise money makes when it's not working for its owner.

An applause record might be used to stress the praise the audience might receive if they follow the speaker's advice and donate generously to some worthy charity.

The effectiveness of such sounds can be increased by a sparing repetition. The motor crash, for instance, could be particularly effective as a concluding grim reminder of what the speaker has said about the dangers of winter driving.

The use of music to create mood can be very effective, but it is not traditionally associated with formal speaking situations. It is true that martial, patriotic music played before political speeches will do much to put the audience in a receptive frame of mind for the usual ringing clichés and rostrum-thumping. The same thing may be said for religious music as an effective atmosphere-setter for sermons. The speaker who uses the "Warsaw Concerto," however, for an atmospheric background to an informative briefing on the advantages of a democratic government in Poland is going too far.

b. Adding Realism: This function of auditory aids is partially related to creating mood, but it has a more specific application. If the speaker wishes to stress the difference between one word and another, either in Morse code or Japanese, what better way than to let the audience *hear* the difference? Such uses of sound are particularly valuable in informative speeches—and, hence, in educational situations—where the emphasis is upon oral rather than visual material.

Another value of adding realism by sound aids is, as we have seen (page 32), that of increasing audience belief or acceptance. When speaker quotes an authority, the audience can legitimately ask itself whether something has been added, changed, or left out. It can also ask whether the speaker has, through his delivery, changed the original meaning. If the speaker is able to play a short transcription of the quote as spoken by the authority, the testimony will have much more effect.

Restraint is required, once again, in using auditory aids to add

realism. It would be ridiculous to have a speaker discharge a revolver to accompany the statement, "A shot rang out."

c. Helping to Tell the Story or Present the Proof: This is closely related to adding realism. Instead of going to great lengths to describe how frightful a large fire can be, a speaker can give the audience a much more direct, vivid idea by playing a recording of the shouts, speech, and sounds connected with such a disaster. If the speaker is narrating a series of events, he may find this job made much more easy and interesting if he can use a transcription of a report made by someone who was "on the spot."

Speakers use argument more often than they do narration or description, for the greater portion of human speech is persuasive in nature. Recordings can be just as useful in molding convincing arguments as they can be in telling stories. A speaker might use musical sounds as illustrations to prove his point. If he wishes to convince his auditors that the nineteenth century had a peace and calmness that the twentieth century lacks, he could play a portion of Brahms' "Cradle Song" as a striking contrast to Schönberg's "Transfigured Night," or Rodgers' "Slaughter on Tenth Avenue." It can be maintained that such a comparison is either an oversimplification or a faulty analogy. Such a criticism stresses the importance of ethical use and careful selection of materials to be employed in similar comparisons. The device is nonetheless novel, attention-getting, and discussion-provoking.

2. METHODS OF REPRODUCING SOUNDS: A speaker may wish to emphasize or clarify some point in his speech with appropriate barnyard noises. There are three ways he can provide these unusual auditory aids.

a. He can, if he is talented, imitate the moos, quacks, oinks, and brayings with his voice mechanism. Some speakers have amazing ability to imitate accents, dialects, animal sounds, and noises such as gunshots, crashes, or escaping steam. These fortunate people make good use of their talents for mimicry in speaking.

b. He can bring an assortment of live barnyard animals with him, though most auditorium managements frown on this, except at political conventions.

c. He can play a recording of the required sounds. Most speakers are

not virtuosos enough to do extensive imitations, nor are they able and willing to import menageries to support their speeches. It is probably better to use some form of sound recording for this task.

While it is true that telephone and radio offer artificial methods of producing sound, the speaker cannot always be assured that they will produce the sound he wants when it is needed. The superior advantages of such sound reproduction devices as the phonograph, the tape recorder, and the wire recorder are various. These merits can best be discussed in connection with the methods of using these machines.

(1) The Phonograph: The popularity of recordings of all types makes the phonograph the most versatile of sound-producing mechanisms for use in speech situations. Music of all kinds, countries, and ages is easily available at record stores and through university and public audio-visual-aid libraries.

Occasionally, it is possible to obtain transcriptions of speeches and radio broadcasts from radio stations, governmental agencies, or audio-visual libraries. A radio transcription is a large, long-playing record specifically made for radio or classroom instructional use. Such a record can contain an entire radio program on both its sides.

Recently, greater emphasis has been placed upon transcribing the voices and sounds associated with great events in our times. The "I Can Hear It Now" series of recordings can offer many useful excerpts for the speaker's use. Also increasingly available are records of authors and poets reading from their own works, as well as recordings of great drama interpreted by outstanding actors. Special sound-effects records, made primarily for theatrical groups or radio and TV stations, can also be obtained through record stores.

A suggested procedure for using the phonograph in speech situations follows.

(a) Select the auditory material appropriate to your speech. Listen several times to make sure you have the best material.

(b) Be sure that your recording and your phonograph give reasonably accurate reproduction of the sounds.

(c) Mark your recording so that you will know where to begin playing it and how long it should be allowed to play.

(d) If you are to operate the record player yourself, place the machine on a table near the rostrum. If you are able to secure the aid of an assistant, it will be more effective to conceal the machine from sight, taking care that the recording will still be audible. This concealment cuts the distraction of starting and stopping the machine to a minimum. It also eliminates the presence of a distracting object which is not necessarily a visual aid.

(e) When the player has been conveniently placed, make sure that the loudspeaker is turned toward the audience. If you have a separate loudspeaker, remove it about 15 feet from the group. Sound heard at close range is often irritating in quality.

(f) Now that the player and the speaker are set up, check all the wiring for proper connection and safety.

(g) Test the record on the machine. Set volume and tone controls to levels best suited to the room. Set the turntable control lever at the proper speed.

(h) Carefully remove all dust from the needle and the record with a brush or a lint-free cloth.

All these steps should be taken before the audience has arrived for the briefing or conference, if possible. Circumstances do not always permit such exhaustive preparation; but you should check all these points, even in the presence of the audience, to prevent any operational disasters. A faulty connection, dusty record, wrong rpm, or excessively high volume setting will destroy the effect of the aid and possibly the effect of the speech.

(i) You are ready to use the recording. You may introduce it or not, depending upon the effect you wish to create. Usually, when a sound or a recorded speech is reproduced without prior explanation, the audience may be confused regarding the speaker's intentions in using the aid. If the aid is self-explanatory or designed to surprise the audience, the speaker need not prepare. In such cases, however, without giving surprise away, you can invite attention by simply saying, "Listen!"

(j) Play the recording, being careful to use only that part related

to your speech. If you use an assistant, work out a signal system for starting and stopping.

(k) While the record is playing, remain as still as possible to prevent attention from being distracted from the sound.

(l) Remove the tone arm from the record and turn the machine off, unless you are going to repeat the sound again and want the electronic speaker to be warmed up.

(m) Emphasize the meaning of the auditory aid in terms of your speech. Don't let the recorded interlude seem extraneous.

(2 & 3) Wire and Tape Recorders: In evaluating reproduction devices, one cannot say that the phonograph is superior to the tape recorder, or that the wire recorder is better than the phonograph. The wire and tape recorders can do a job for the speaker that the phonograph cannot, but they are severely limited in that it is not easy to get prerecorded tapes and spools of wire. The speaker who is using the phonograph can usually find the sounds he wants with the help of a good record store or audio-visual library.

Tape and wire recorders allow the speaker to do his own recording on the spot. If he wants to bring personal interviews to a conference, without actually bringing the people in, he can prerecord the interviews at his own convenience. If a speech, news announcement, or drama on his radio or TV set offers useful material, he can record the sound in his own home with a minimum of difficulty and a maximum of fidelity in sound reproduction.

Cutting a phonograph record, however, is an exacting process, requiring expensive, bulky, delicate equipment. It is a job for an expert, if the recording is to be of good quality. Mistakes cannot be removed. An error in speaking or in cutting means that the whole process will have to be begun again.

Tape and wire recorders do not offer these problems. The tape recorder records the sound on a reel of thin plastic tape by a magnetic process. The wire recorder also records magnetically, but uses a spool of fine, strong wire to store the sound. With a little practice, even a child can learn to control the tone and volume well enough to make creditable recordings. The recording and playing controls are the essence of simplicity.

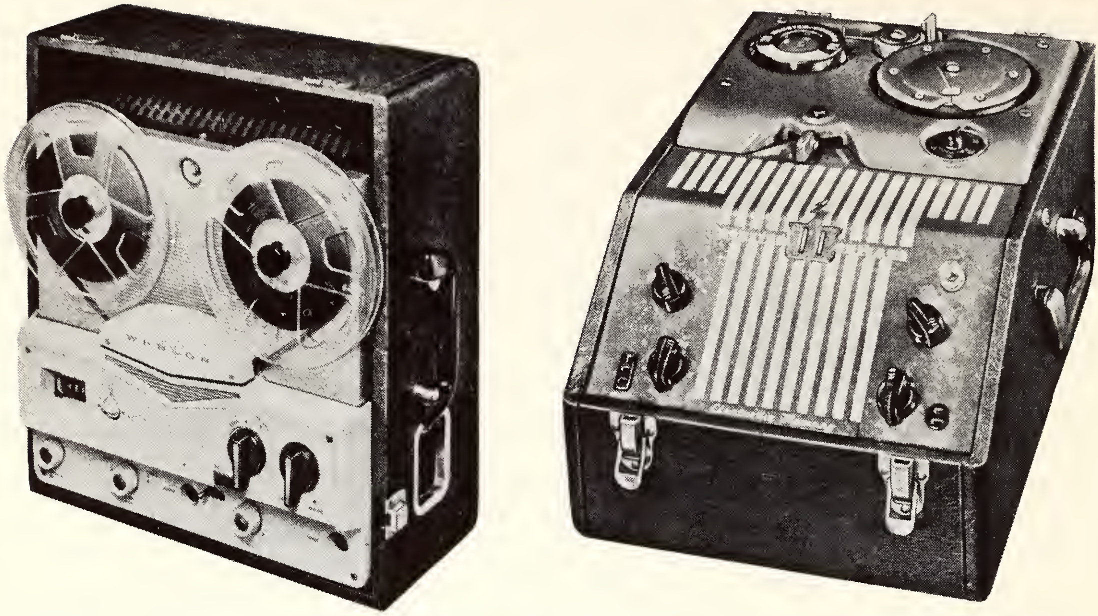


FIGURE 2–1. Economical recording devices make it possible for speakers to create their own audial aids. Here two popular models are illustrated. On the left is the Webcor tape recorder, and on the right is the Webcor wire recorder. Interviews, musical selections, readings, sound effects, and quotations can all be prepared at the speaker's convenience and to his taste. It is also possible to edit such recordings. (Courtesy of WEBCOR.)

Some of the advantages of tape and wire recordings in addition to ease of recording, are—

(a) If a mistake is made, it can be electronically "erased" with no loss of tape or wire.

(b) Erasing permits entire spools of tape and wire to be used again and again for different recording projects.

(c) By splicing tape sections with Scotch tape or simply tying sections of wire together, it is possible to edit the recording so that the listeners will hear only the essential portions of it. Unfortunately, this also permits unethical editors to alter meaning by rearranging or lifting material out of context.

(d) Tapes and wire spools can accommodate much more material than most phonograph records. Some tapes can hold from four to six hours' worth of sound on both sides. Even the smallest of the standard tape recorders will record an hour or two of music, speaking, or random sound effects.

(e) Tape and wire recorders have the advantage of portability, which bulky record cutters do not have. For recording, however, it is always necessary to have a power source, since the machines are electrically operated.

(f) While the speaker is limited to the phonograph recordings available to him, with tape or wire he can go out and find exactly the sounds he wants. As has been mentioned, he can take his choice of what is offered on radio and TV. He can record personal interviews. He can get just the barnyard noises he wants. He can manufacture his own sound effects at home and get them permanently on tape or wire. He can even conceal the recording microphone to get unrehearsed material. Alan Funt's "Candid Microphone" series shows how effective some of these spontaneous expressions of opinion can be.

3. SUMMARY OF REQUIREMENTS FOR AUDITORY AIDS: From the preceding discussion of the kinds of sounds and the methods of sound reproduction which can be helpful to the speaker, it is possible to derive five general qualities that are essential in auditory speaking aids. These qualities or requirements may be called the "Five A's."

a. Audibility: The sounds must be loud enough to be heard by all the audience without anyone having to strain to understand. The volume must not be too loud, however, for this will blast the sound at the audience. The sounds should be clear, distinct, free from distortion. In selecting the sounds, you should make certain that the sound is not confusing. If the audience is to hear a locomotive, the sound shouldn't resemble a rusty hot-water boiler. Recording and equipment must be checked to ensure that everything is ready for reproducing the sound. A long-playing record may be very amusing when played at 78 rpm, but it will not be especially edifying to the audience.

b. Arresting Quality: If the aid is worth using at all, it should be powerful enough, dramatic enough, novel enough, or amusing enough to get and keep the audience's attention for you. An auditory aid which lacks these qualities might profitably be omitted. Avoid the bizarre always.

c. Appropriateness: Great care must be taken in selecting an auditory aid. It must apply to the speech. There is no defensible reason for using

an aid that has only a tenuous connection with the briefing or conference. The aid must also be simple. If it is too complex—or too long—it will tend to confuse the members of the audience and to distract their attention from the speaker and his subject. The usual requirements of good taste should be observed in choosing the aid. These may vary with the audience to be addressed.

d. Adaptability: Choose an aid that fits your speech and can be used with it smoothly and conveniently.

e. Accessibility: Once you have chosen your aid, you must be able to get it for use. If you want barnyard noises, but can't imitate them and can't find a recording to use, you may have to go without this novel aid. Occasionally, you may find that recording equipment or power sources will not be available. This effectually prohibits any recordings. Unless you can bring the real thing with you, or imitate it, you will have to be content with a more prosaic presentation.

f. Auxiliary Nature: The chosen sound effects or vocal excerpts must be aids only. They should never become the center of audience attention.

B. VISUAL AIDS FOR SPEAKERS: Just as there is proverbially "more than one way to skin a cat," so there are a number of methods for classifying visual aids. An obvious way would be to separate them by function, but fortunately or unfortunately, visual aids are so versatile that functions constantly overlap. Another method of discussion might be to divide them on the basis of materials used in construction. Few visual aids are composed solely of one material, however, so this classification is not too helpful.

Weaver and Bollinger[2] have set up four main groups in their division of visual aids. Briefly, their classification is this: (1) Aids of *reality*—the object or material itself. These are best when dealing with concrete, non-abstract materials and ideas. (2) Aids of *pseudorealism*—a replica, a schematic model or mock-up. If the real objects and materials are not available or are too large or too small to use, these mock-realistic substitutes are best. (3) Aids of *pictorial realism*—sketches, photographs, and films. If neither real objects and materials nor their substitutes are avail-

[2] *Ibid.*, p. 4.

able, these two-dimensional aids will be helpful in forming correct images. (4) Aids of *pictorial symbolism*—diagrams, graphs, and maps. These aids are not to be regarded as fourth-best. They usually do a job that is quite different from that done by the first three. Diagrams, for example, are most useful in explaining abstract ideas, clarifying relationships, or presenting sequences and procedures which are too complex for brief verbal explanation.

To discuss possible uses of visual aids in speaking situations such as briefings and conferences, it will be necessary to alter this analysis somewhat. It is proposed that the following system be used: (1) Aids of reality. (2) Aids of pseudoreality. (3) Aids of pictorial realism and symbolism. (4) Aids in reproduction of the three groups just listed—blackboards, opaque projectors, slide and filmstrip projectors, and motion picture projectors.

1. AIDS OF REALITY: These include all objects or materials, whether naturally or artificially produced. Objects can be such things as weapons, teeth, leaves, clocks, shoes, or animals. Materials include such things as a splinter of glass, a piece of wool cloth, a glass of milk, talcum powder, or snow. In using these objects and materials, a speaker is following the old maxim, "Things seen are more powerful than things heard." The objects serve several purposes as visual aids: (1) They help gain audience attention. (2) They help leave vivid, lasting impressions. (3) They help the speaker to clarify his points. (4) They enable the audience to form correct images of the objects or materials.

   Not every speech needs such a visual aid. The speaker must apply the four tests listed above to decide if a visual aid he wants to use is really going to be a help to him. Not infrequently, a speaker decides that a visual aid will "liven up" his presentation, and he selects an object or material which, instead of clarifying, only serves to confuse his audience. One example of this misuse of visual aids occurred when a speaker began his address by taking a large lobster out of a box. Naturally enough, the audience's attention was immediately aroused and held. The speaker had chosen a good aid in terms of its novelty. The speech began: "You see this lobster? Well, he's like a lot of people I know. Tonight, I'm going to talk about the need for more ambition in people . . . ." The speaker talked for about ten minutes on the subject of ambition. The lobster sat on the speaker's table, staring dully at the audience. The audience stared back. They wondered when

the speaker was going to explain what the lobster had to do with ambition.

Possibly, the lobster could have been a very effective visual aid, *if* the speaker had taken more care to build his ideas around a comparison of a lazy lobster and a lazy man. The idea may have been in his mind, when he chose the lobster as an aid, but, if so, the audience never discovered that interesting fact. And although audiences can be extremely sensitive, even to the point of realizing that some speakers aren't sincere in their remarks, no audience is composed entirely of mind readers. If the speaker wants to make himself understood, he must use his speech and his aids to achieve that goal, not to obscure it.

On another occasion, a speaker appeared dressed in a gentleman's court costume, typical of the late eighteenth century. This got attention at once. The speaker then proceeded to *use* his aid as a device to prove his thesis: Men's suits today have a number of useless features which are holdovers from the past. Step by step, he indicated what the various parts of the costume were used for, each time comparing its use with the nonuse of same button or lapel on a modern suit. Perhaps this speech could have been successfully given with pictures, or even without any visual aids, but the effect was immensely increased by this speaker's ingenuity. The audience was able to *see* the real object and then compare it with its modern counterpart which they were all wearing.

Speakers often need to use more than one object or material to illustrate their speeches. In such cases, it is advisable to rehearse the use of the aids thoroughly. If one mounts the various samples of material or the selected objects on a sturdy board, he will be able to have all his aids *where* he wants them *when* he wants them. He won't have to fumble around in a box to locate them. Also, he will be able to arrange them on the board in an order which will duplicate that of their appearance in the speech. If he is discussing the steps or materials used in manufacturing an egg beater, for instance, he can take the various kinds of materials used and mount them in such a way that the process of manufacture will be readily apparent. One way to do this is to take the various parts in successive stages of production and place these parts on arrows pointing down to the finished product—also a real object. The evolution of the beaters may be shown along one arrow and the evolution of the handle along another arrow.

Effective as this display method may be, there are times when it

is not desirable. Visual aids should be used and then removed from view lest they distract the audience from the speech. The mounted display does not permit one item to be removed after it has been discussed; in fact, its removal might ruin the whole effect. But some members of the audience may have become so intrigued with one small object in the collection that they are no longer paying attention to the rest of the speech. When there are such dangers of inattention, and when several objects or materials are necessary, the speaker will do well to introduce them individually and remove them as soon as they have been used.

Several qualifications must be met in choosing objects and materials for visual-aid use: (1) They must be readily available. (2) They must be portable. Some objects are far too large to be carried around by the speaker. A tank might be a very interesting visual aid, but it is certainly too cumbersome to drive into a small conference room. (3) They must be large enough to be easily seen. Some objects, such as a cricket, for instance, are far too small for use as visual aids in most situations. Some, such as a white mouse, may be excellent for an audience of ten, but are of no value for an audience of a hundred.

2. AIDS OF PSEUDOREALITY. This class of aids includes models and mock-ups of real objects. The qualifications listed above for Aids of Realism indicate at the same time, some of the reasons for using aids of pseudorealism: (1) When the real object is not available, it is often necessary to make a replica or model of it. (2) If the object is too large for use—as a cargo plane would be—scale models are more efficient method of presenting the aid. (3) If the real object is too small, a blown-up model will reproduce it in detail large enough for all the audience to see.

Models have another advantage over the real objects. They can be dismantled, or cut away, to show how or of what they are made. Some models may even be constructed with moving parts, so the audience may see exactly how the real object works. A model on reduced scale of an automobile transmission, with plastic parts, can give an audience a much clearer idea of the functions of this mechanism than a mere description could provide. It would also be much easier to demonstrate the action with the conveniently small and light scale model. A real unit, fresh from the factory, would not only be unwieldy, but would also, because of its metal casing, effectually prevent the audience from seeing it work.

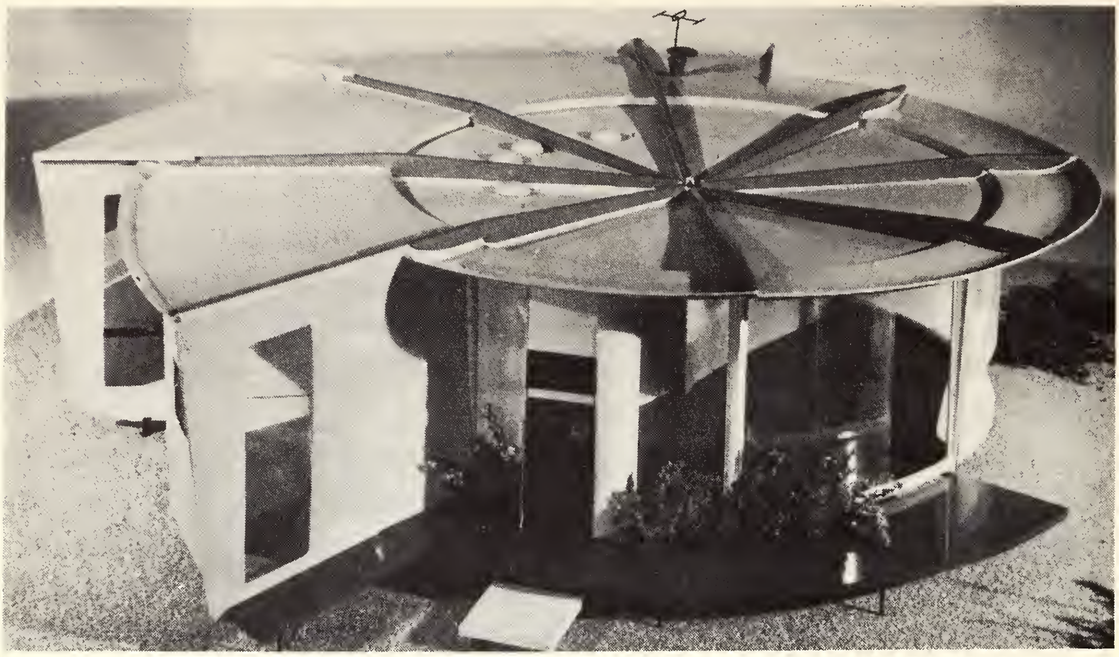


FIGURE 2–2*a*. Three-dimensional models built to scale, as is this model of a modern house, can help audiences to develop accurate concepts of size and proportion. (Courtesy of Charbonnages de France and McGraw-Hill *World News*.)

You must beware of three possible sources of audience misinterpretation of models used as visual aids: (1) The model may represent an object removed from its functional relationships; hence, it is only partly real. (2) The model may be either smaller or larger than it really is. This can lead to serious misunderstanding. (3) The model may be oversimplified, and thus not accurately represent the real object.

McKown and Roberts, in *Audio-Visual Aids to Instuction,*[3] insist that the speaker must be careful to explain what differences there are between the functions, size, and complexity of the model and those of the real object, so that audiences will form correct images. Occasionally, other visual aids, such as photographs or drawings of the real objects, may be necessary to clarify these points. It should be remembered, particularly with reference to the third point above, that the purpose of a model is usually not exact duplication of the original. When a model is an oversimplification of the real thing, there is usually an excellent reason for this. If one wishes to demonstrate the action of a typewriter, he may use a cutaway or schematic model which bears little or no resemblance to the appearance of a typewriter. The

[3] Harry C. McKown and Alvin B. Roberts, *Audio-Visual Aids to Instruction,* 2d ed., McGraw-Hill Book Company, Inc., New York, 1949, pp. 77–78.

purpose is to show the principle of the key action, rather than to teach the audience to identify typewriters when they see them.

The main kinds of models which speakers may find useful are (1) reproductions—if the real item cannot be used, (2) scale models—if the real item is too large, (3) enlarged models—if the real item is too small, (4) demountable models—to show how the real item works or is constructed, (5) cut-away or cross-sectional models—to do the same thing as No. 4, without losing the proper relationships of the various parts, (6) working models, (7) transparent models, and (8) mock-ups.

Mock-ups are generally understood to be one part or a system of parts removed from the parent unit and mounted in such a way that the operation of these parts may be more clearly comprehended. A mock-up of an automobile's electric system, for instance, would include headlights, fog lights, parking lights, tail lights, brake lights, left- and right-turn lights, horn, battery, generator, distributor, spark plugs, ignition, and driver's control panel laid out on a large board schematically as they would be found in the automobile itself. With

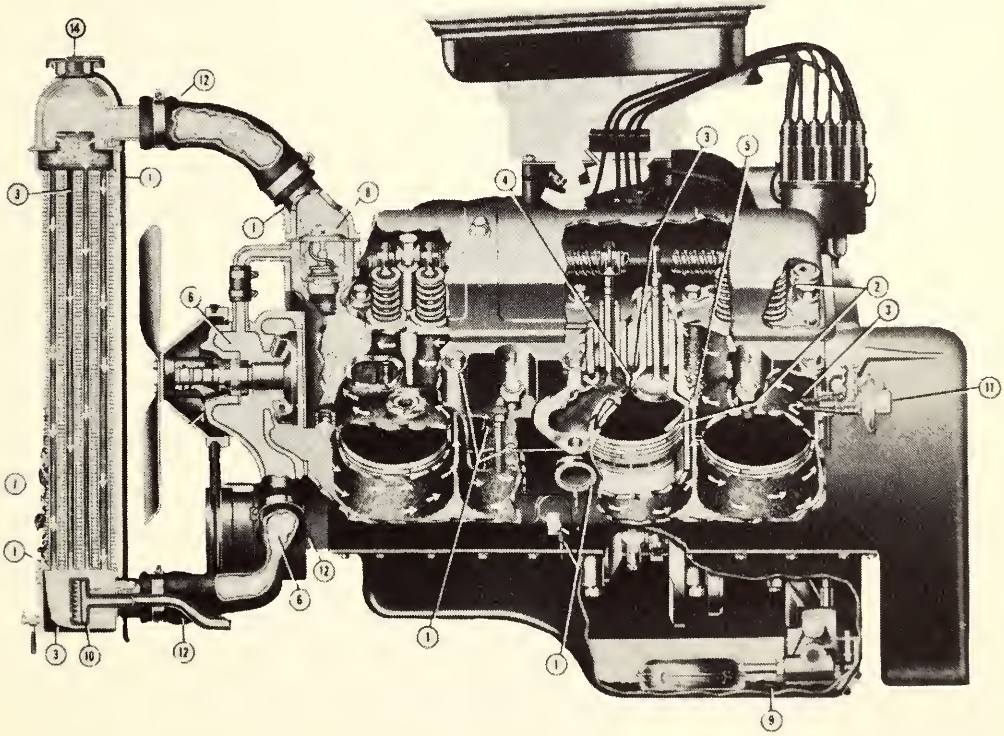


FIGURE 2–2*b*. Complex systems such as the cooling cycle of a V-8 engine, illustrated above, are often too difficult or expensive to demonstrate in three-dimensional scale models. Here, a two-dimensional cut-away drawing reveals both structure and function. (Courtesy of *The American Automobile*.)

such an aid, it is possible to concentrate attention on the details of the electric system without having the audience distracted by other interesting but nonessential features of the machine. Such a device can be invaluable in a briefing.

Speakers occasionally find that an even more schematic type of model can be highly effective in illustrating their talks. The sand table, tilted so the audience can see its contents clearly, is one version. Another, similar to the mock-up, is a wallboard arrangement. Both the table and the board can be used to illustrate realities of larger scope than those previously discussed. For instance, one can, by using models or symbolic objects, show a regimental defense plan in a sand table. On a wallboard, one might set up a three-dimensional layout of a well-planned town or a national railroad network—possibly with tiny electric lights to indicate main lines. The wallboard is the more effective because it can be viewed more easily by large audiences. The sand table, while not as easy to view, has more versatility, in that the sand and the objects may be freely moved. This is also true of an expedient variation of the sand table—a wool army blanket rumpled in such a way that contours and terrain features are produced.

To take advantage of the better display position of the wallboard and to avoid the handicap of fixed—wired or glued—objects on it, the felt or flannel board and the magnetic board were devised. The felt board, as the name implies, is a simple board, possibly plywood, covered with felt or cotton flannel. On this board may be placed two-dimensional models, as of human figures, machines, trees, or animals. These may be either cut from flannel, which sticks directly to the flannel board, or they may be made of paper or cardboard and then backed with strips of flannel or sandpaper to make them cling to the board. Because none of the objects are permanently fixed, the speaker can move or remove them at will, making possible a wide variety of uses for the board. The magnetic board is surfaced with thin sheet metal. On this board are placed models which have tiny magnets fastened to their backs. The speaker can move the models quickly and easily around the board without having to worry about having them fall off, which occasionally happens to the flannel-user, if he is not careful.

3. AIDS OF PICTORIAL REALISM AND SYMBOLISM: With the aids mentioned above, the discussion has been moving from three-dimensional realities or models to two-dimensional depictions. These aids are usually known as graphic materials. Instead of revealing

themselves to the audience, as did Nos. 1 and 2, through shape, height, width, depth, weight, or motion, these aids reveal themselves by lines, colors, figures, and numbers which represent, pictorially or symbolically, ideas or objects.

One great advantage of these aids is that they enable the viewer to *see* much more than his eyes could encompass in reality. He can, for example, see the whole world on a globe no bigger than a basketball, or he can see how much oil each state in the United States has used for the last ten years, or he can see how modern drama has developed through the ages from the primitive rituals of early man.

Among the most-used pictorial devices are *pictures*—including photographs, drawings, posters, and cartoons—and *maps, charts,* and *graphs*. The chalkboard, a most vital visual aid for speakers, is actually a means of reproducing the pictorial devices above, and as such, will be discussed under *Aids in Reproduction*.

a. Pictures: Almost everyone is familiar with how many words one picture is supposed to be worth to the Chinese. If this proverb were literally true, a speaker might show his audience ten pictures and then sit down, having given them supposedly the equivalent of ten thousand words. Unfortunately, this labor-saving method won't work with speech. Pictures, no matter how eloquent, how vivid, how dramatic, how crystal clear, do not tell the whole story. They must be interpreted. Indeed, psychologists have found human beings notoriously unable to agree on what pictures really reveal. Shown a series of pictures of men's and women's faces, a group of subjects were asked to name the emotions they saw expressed on those faces. Amazingly enough, the subjects were not able to agree. Some found grief where others found gaiety or anger. Some saw love where others saw boredom or hatred. A picture, then, is just a shadow of the reality. Not having the reality in its environment for comparison, one must rely on the speaker to set the picture in proper emotional and logical perspective.

Among the kinds of pictures available to the speaker are photographs, motion pictures and slides, paintings, sketches, drawings, and cartoons. Photography can come closer to a two-dimensional reproduction of three-dimensional reality than any of the other pictorial forms listed here. Some painters, it is true, can almost equal the work of a camera, but the effect and intent of painting are usually different from those of photography.

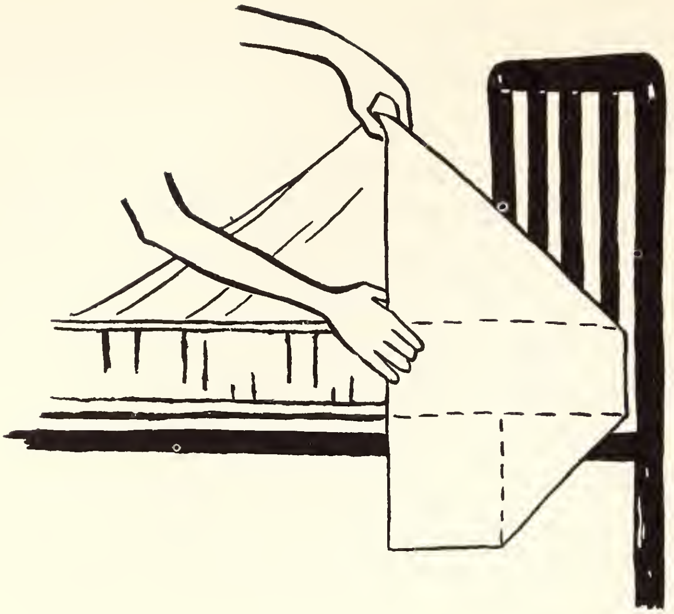


FIGURE 2–3. The correct method of making a mitred corner on a bed sheet is shown. Good visual aids need not be works of art, but they should, like this one, be simple, easy to see, limited to *one* main point, and free from excessive lettering or decoration.

Photographs are particularly useful to the speaker who cannot bring to his audience the real object or material, or a model of it. With proper explanation, the photograph may even be as effective as the real thing, and less trouble to use. Photos, like wire and tape recordings, can be specially made by or for the speaker. If a speaker wishes to describe a recent trip through a steel factory, he might well illustrate the visit with pictures he has taken on his visit. Here, the problem is one of reproduction. Too often, speakers will use small photos which cannot be seen by most of the audience. If it is impossible for the speaker to get a satisfactorily sizable enlargement of his picture for exhibition, he may find it more convenient to use a small print with the opaque projector or have a slide made from his negative. These methods of reproduction will be more fully discussed later.

McKown and Roberts[4] list six values of still pictures: (1) They are real and vivid and bring clarity, enriched meaning, and emotional response. (2) They provide motivation because of their immediate appeal. (3) They are easily available. (4) They are convenient to use. (5) They are inexpensive. (6) They can be used repeatedly.

[4] *Ibid.*, pp. 137–138.

You should have little difficulty in finding appropriate pictures, since so much of today's news is told in pictures. Many newspapers and large magazines, such as *Life, Look,* and *The National Geographic,* can make reprints or actual photographs available on request. Schools, libraries, government agencies, industrial concerns, advertising agencies, museums, and photographers all may be possible sources of useful photos. Many speakers find that their own organizations maintain photographic files or can have photographs reproduced for them.

Slides, which may show pictures, maps, graphs, or charts, will be discussed in connection with motion pictures. The principles governing the type of material projected will be covered in this section under the appropriate headings, but there are special problems to be considered when pictures, graphs, or maps are projected either still or animated.

Paintings, sketches, and drawings can be of use to the speaker. Consciously artistic work is best adapted to talks concerned with the subject matter of the paintings or sketches or with the problems of artistry. To dazzle an audience with a brief view of El Greco's "View of Toledo" and then proceed to discuss the charms of travel in Spain may be all very well, but many audiences would find it hard to put the El Greco out of their thoughts long enough to listen attentively to the speaker. The difficulty here is that the aid is inappropriate to the speech. It is not, in itself an inadequate work of art, far from it; it is, unfortunately for the hapless speaker, so excellent, so stimulating, so complex in subject matter, rendering, and tonal combinations that an unassuming talk on Spanish tourism can't compete with it.

Wiser speakers will select drawings which are simple and show exactly what the audience is supposed to see. Lines should be *large, bold,* and *black*. There should be no extraneous decoration or fussy cross-hatching, shading, or stippling. Important points in the drawing should be highlighted with spots of bright color. The drawing should not attempt to show more than one thing. If several points are to be made visually, it would be better to have several drawings. It should be large enough and clear enough to be seen by all the audience. If lettering is used with the drawing, it also should be large, bold, and clear. Keep lettering to the barest minimum necessary. After all, the speaker will be there to explain the aid. Lettering should never include words beyond the understanding of the audience.

Speakers who are planning to use cartoons or posters for visual aids

"I'm In The Fourth Grade, Third Shift, Second Layer"

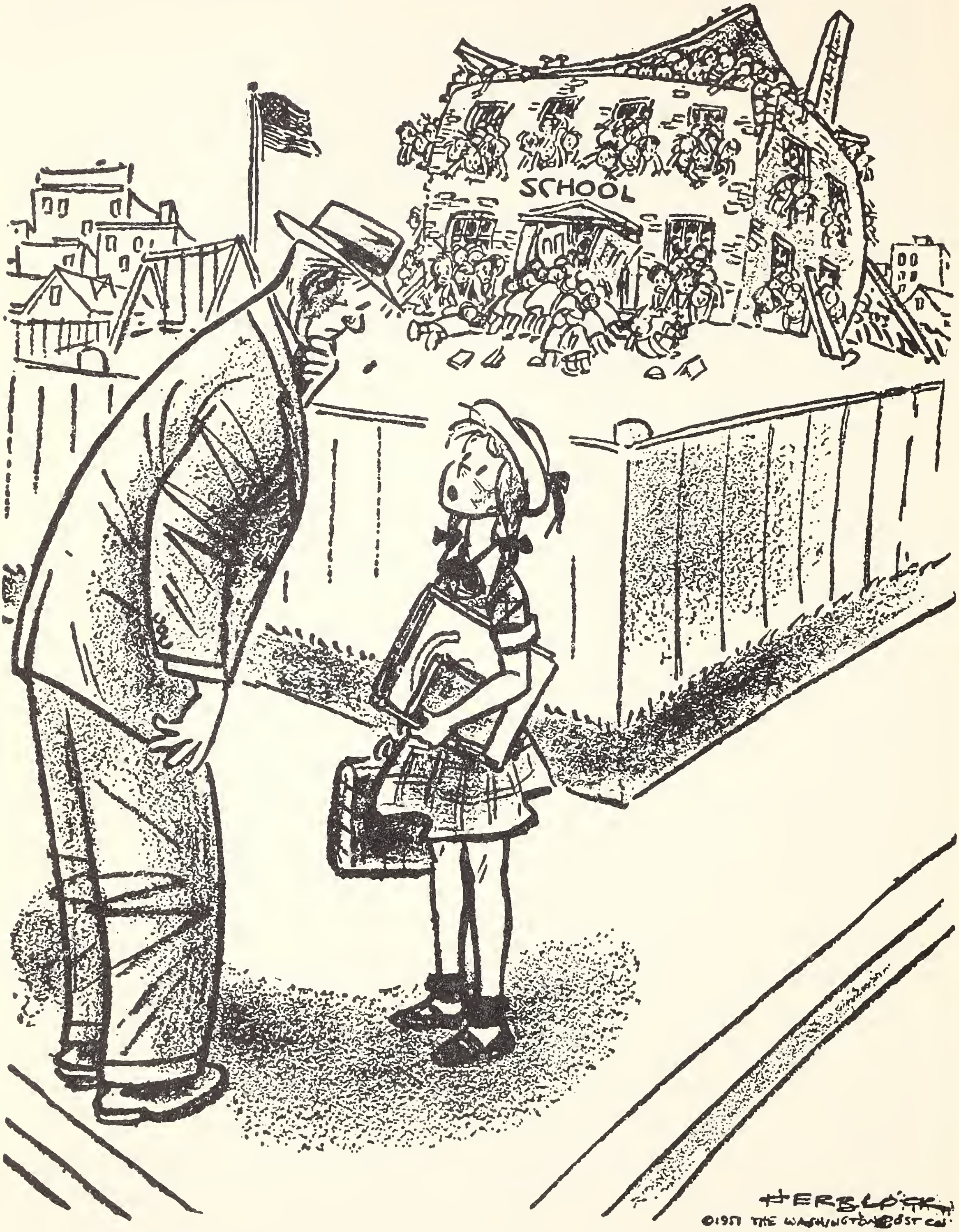


FIGURE 2–4. Herblock's cartoons are famous for their impact on the viewer. Such visual aids can be useful to the speaker because they combine attention-getting qualities with simplicity and economy of line. The often wry humor of newspaper cartoons helps audiences to remember the point. (From *The Herblock Book,* Beacon Press, 1952. Reprinted by permission.)

will have to be very careful to apply the foregoing tests to the proposed devices. Just as photos are shadows of reality, so are drawings shadows of photos. Cartoons move beyond the essential simplification of real detail in a drawing to a frankly exaggerated rendering. One of the chief values of cartoons and posters as visual aids rests in this very exaggeration. It stresses to the exclusion of all else the point the speaker wishes to make—if he has chosen well. Unfortunately, all cartoonists are not Herblock. The speaker who would use a cartoon must make sure that there is only one point to the cartoon of his choice, that the point is appealing and clear, that there is no extraneous detail, that the symbols used in the cartoon will be universally understood by his audience without a tedious explanation—"Well, you see this donkey here stands for the Democrats and . . ."—and that the cartoon is large enough or can be enlarged to permit the whole audience to see it clearly.

All the pictorial aids mentioned above should be carefully mounted on some kind of sturdy cardboard. If they are to be reused a number of times, it might be well to mount them on wood. In such cases, it may also be advisable to protect the surfaces with glass, acetate, cellophane, or shellac. Such covering helps prolong the life of the picture and keep it clean . . . but shiny surfaces under auditorium lights can often act as reflectors, so that the audience sees not a picture but a mirror. The speaker must therefore be careful of the placement of pictures in relation to the light sources. It might even be well to test the lighting before the audience arrives.

The actual method of displaying mounted pictures will depend upon facilities and the needs of the speaker. If the picture is to be shown briefly, the speaker may wish to leave it face down on the table—or hidden on a shelf in the speaker's rostrum—until he needs to show it to the group. As soon as he is finished with it, he will conceal it again, so that it will not detract from the rest of his speech. A picture which is left exposed long after it has been used can prove a powerful distraction, especially if the audience is becoming bored with the speaker. They may thank him for giving them something else to think about, but that was not his intent. If the speaker wishes to point out several features of interest in the picture or to return to the picture several times in his speech, he may well mount the picture on an easel so that his hands can be free when he explains the picture. Of course, he will want to have a plain white card or cloth to conceal the picture before he reveals it and when he wants to reconceal it.

In working with pictures, as with all the other pictorially realistic or symbolic aids, the speaker will be well advised to use a pointer to stress detail, line, or movement. Use of the fingers and hands is ungainly, often causing a speaker to hide parts of the aid with his arm or body. Five fingers are not nearly as precise as the thin tip of a good pointer. A good pointer about three feet in length will also enable the speaker to stand far enough away from the aid so that he can look at it and at his audience at the same time. If he is too close, he often has to turn his back to his audience to look at his aid. This failure can be cut to a minimum by *knowing* the aid thoroughly before making the presentation. There is nothing more inexcusable and humiliating for the speaker or frustrating for the audience than to have the speaker stare dumbly at his drawing, trying to discover just what that last point he wanted to show them really was.

b. Maps: The general rules regarding simplicity, visibility, use of color, mounting, method of display and demonstration, durability, and portability apply also to maps and all the other graphic aids.

Imagine the agony of the speaker and the amusement of the audience when this happens: "Here's a map of Europe. Now I'll show you right where Paris is." The speaker's finger boldly jabs at the first large city he sees. Paris? No, but close—Berlin! The necessity of being thoroughly familiar and rehearsed with any of these aids cannot be stressed too much.

Maps are, largely as a matter of convenience, primarily two-dimensional, though they are symbolic pictures of three-dimensional things. There are, however, several three-dimensional types of maps which speakers may find useful. The best-known is the globe of the world, which may have a smooth surface or may be molded in relief to show relative elevations above sea level. There are also global devices for depicting the constellations and the solar system.

A type of three-dimensional map which is not globular is the *relief map*. On such a map, relative elevations above sea level are modeled realistically, but the map is flat, no attempt being made to duplicate the earth's curvature. Most of these maps are detailed reliefs of small segments of the earth's surface. The Army Map Service has prepared some excellent relief maps in molded plastic.

Among the maps which are completely two-dimensional are the following, all of which may be useful as visual aids: (1) *outline maps,* which show only main bodies of water, continents, national boun-

FIGURE 2–5. An instructor uses a three-dimensional map as a visual aid in a seminar in geopolitics at the Massachusetts Institute of Technology. Use of the globe avoids distortions in size and in relationships between land and sea areas which are unavoidable in two-dimensional projections. This global map has the added advantage of being modeled in relief so that depressions and elevations stand out significantly. (Courtesy of Massachusetts Institute of Technology.)

daries, and principal rivers; (2) *political maps,* which by use of line and distinctive colors show principal political divisions of countries and states, rivers, roads, cities, and towns; (3) *physical maps,* which show relative elevations by means of shading, contour lines, and/or changes of color; (4) *political-physical maps,* which combine the functions of No. 2 and No. 3; (5) *population maps,* which show distribution of people, usually per square mile, by variations of color or shading; (6) *economic maps,* which show by colors, shading, dots, or symbols the distribution of various industries over a geographic area; (7) *weather maps,* which show existing weather by lines and symbols and serve to predict future weather; (8) *soil and vegetation maps;* (9) *road maps;* and (10) *naval* and *aviation navigation maps*. There are also legions of maps which show such specialized items as military campaigns, boundary changes and expansions, explorations, distribution of disease,

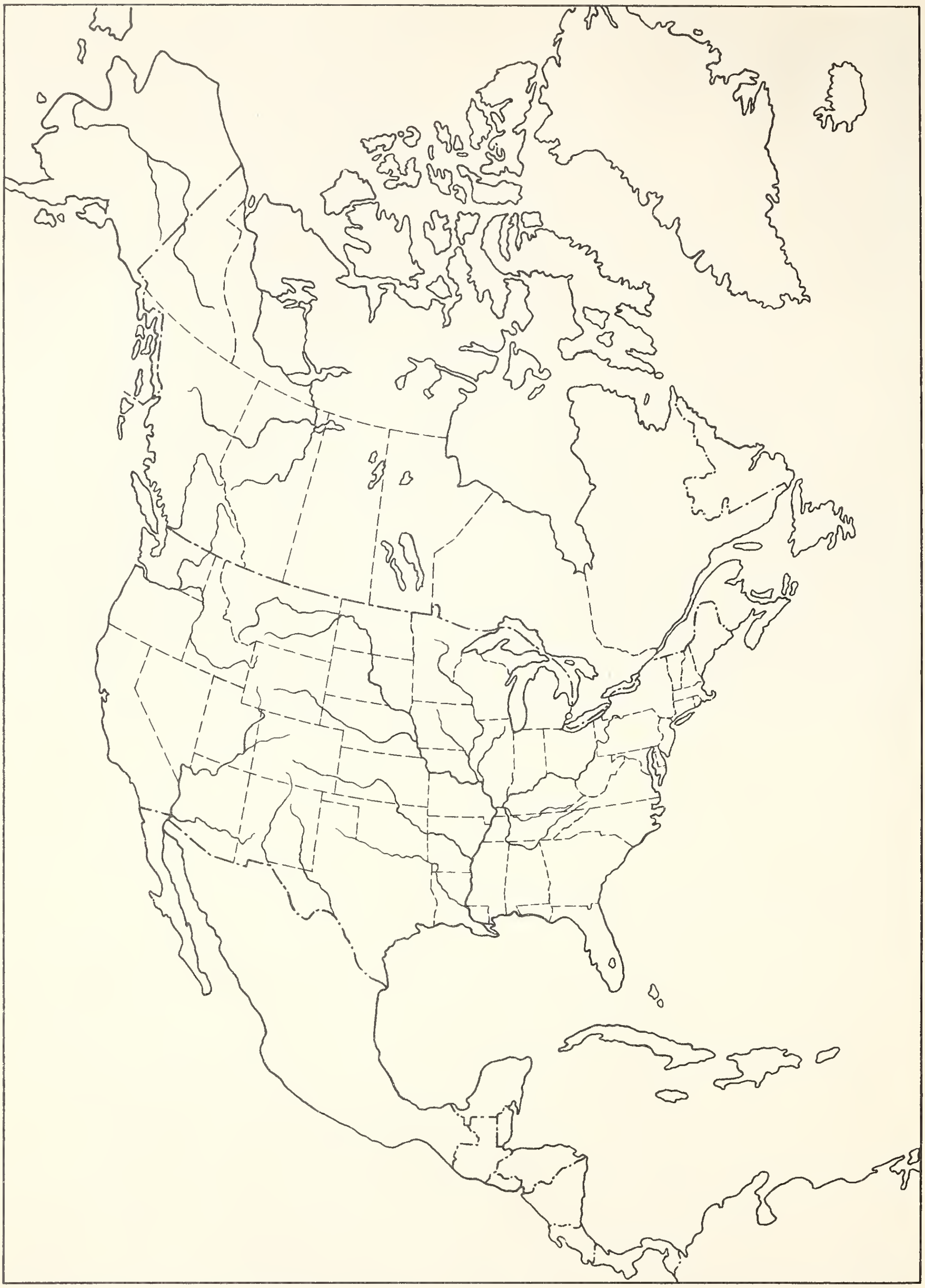


FIGURE 2–6*a*. A variety of flat maps are available to the speaker. An outline map such as this one of North America can be easily adapted to special needs because it is uncluttered with printing.

FIGURE 2–6*b*. A political map such as this one of Mexico, Central America, and South America provides more detailed information about countries, cities, and bodies of water.

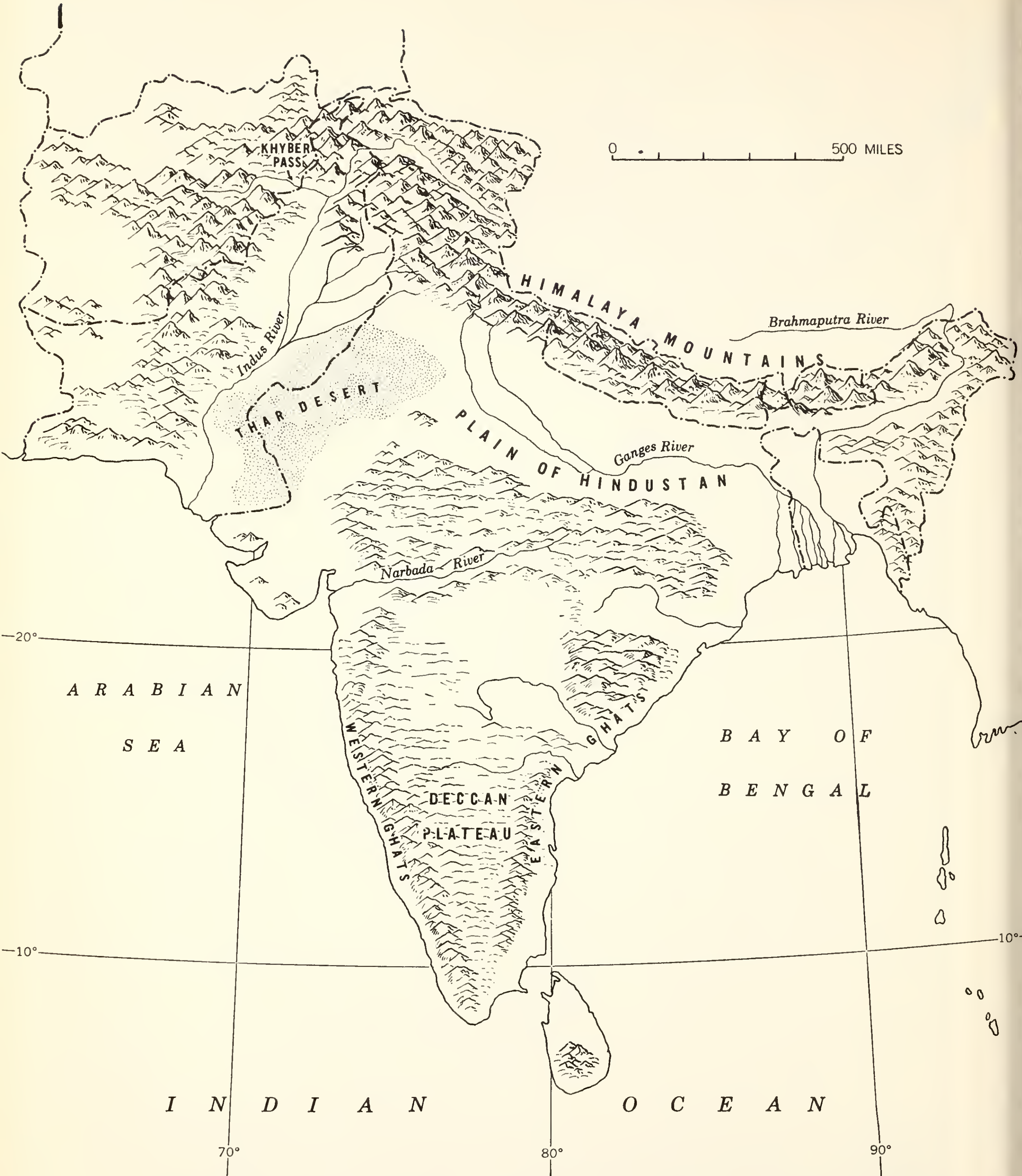


FIGURE 2–6*c*. This physical map of Southern Asia can help a speaker to point out bodies of water and three-dimensional topographical features. (From Freeman and Morris, *World Geography,* McGraw-Hill Book Company, Inc., New York, 1958. Used by permission.)

poverty, and national groups, and the location of famous personalities or travel curiosities.

The maps which show large land areas, elevations, and national divisions are called general-purpose maps. These can range from the simplicity of outline maps to the detail of National Geographic Society maps. Maps which show specific items, such as vegetation or rainfall, to the exclusion of all other information, are called special-purpose maps. In using either type of map, the speaker has to make adjustments. The outline map as it stands is too bare of detail for most speech purposes. The National Geographic maps are far too detailed. From a distance nothing on them stands out clearly. This is also true of many special-purpose maps.

If the map is expendable, the speaker can adapt it by using bright contrasting colors and large bold lines and letters to emphasize the points of interest on the map. Outline maps, because of their relatively sparing detail, are particularly well suited for such treatment. If the map must be used again for other purposes, the speaker can cover it with acetate or cellophane, using grease pencils to outline important details. For small audiences, thin tissue overlays can be used effectively. For use with larger groups, however, completely transparent material is advisable if all are to see. The advantage of the acetate or cellophane method is that it permits the use of several overlays in succession. An effective use of this method could be the demonstration of the growth of Nazi Germany. The audience first sees the map with pre-Hitler Germany in red—a strong contrast to the more quiet yellows and greens of the other countries. As the speaker describes the progress of Nazi conquest, he drops successive cellophane overlays over the map, causing the red blot of Nazi Germany to spread like a great cancer over the face of Europe.

If a map is too small, it may be projected by means of an opaque or a slide projector. Also, by dividing a small map into squares and transferring the detail of each square to a much larger surface, divided into squares five or ten times the size of the small squares, it is possible to enlarge the original map with little or no distortion.

Colored cut-outs representing men, machines, or directions of movement—with large arrows—can be pinned to maps. Colored thread or ribbon can be useful in showing trade, navigation, or flying routes. An inventive speaker will have no difficulty in devising many variations of these techniques. He must keep in mind, however, the cardinal requirement of visual aids—*simplicity*. Most maps, being already complex in

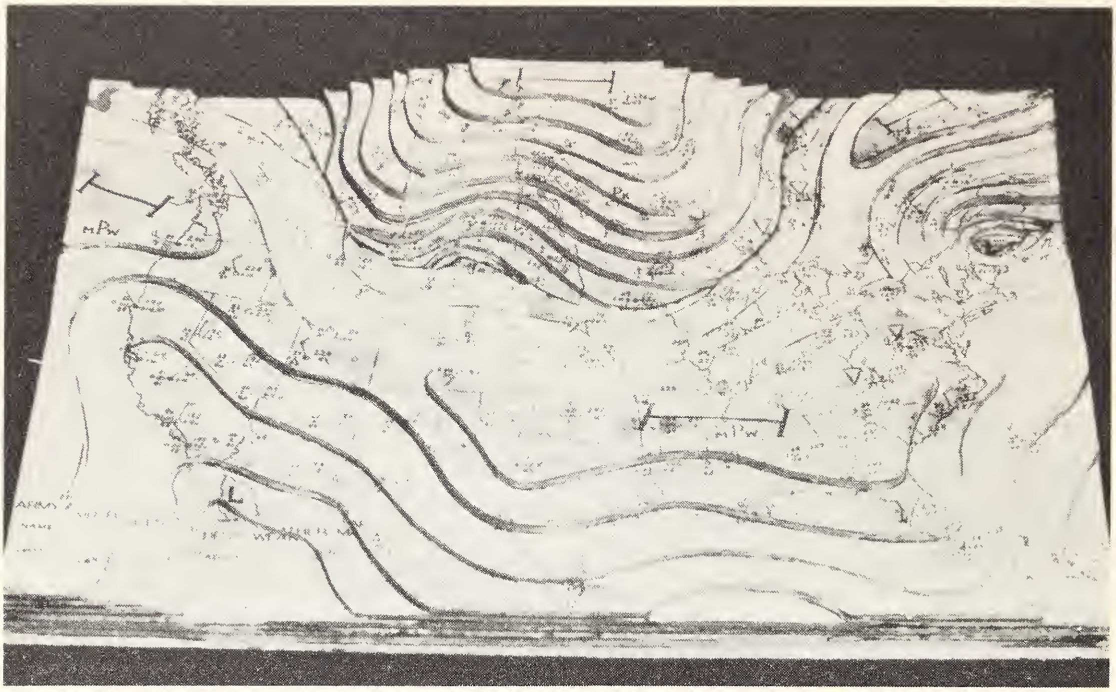


FIGURE 2–7. Sometimes a compromise will be made between flat maps and relief maps. Here, a flat map was marked with high- and low-pressure areas. Then the areas were cut out and mounted on a thickness of board to give a more accurate image of the pressure variances. To illustrate problems in weather forecasting, a speaker would find such a map more effective than a flat weather map. (Official U.S. Air Force photo.)

detail, subtly encourage the speaker to add to the detail and subsequent confusion, rather than to subtract from it.

Since any two-dimensional map must be a compromise with global facts in some respects, it is advisable to give some thought to the choice of *projection* when selecting a map, and to choose one that tells the truth in those respects most important for the speaker's or briefer's purposes at the time. Unavoidable distortions in flat maps may have disastrous effects if the speaker is trying to show accurate relationships. A description of the map projections commonly used in the global age may be found in Appendix B of *Elements of Geography,* by Vernon C. Finch, and others.[5] There too the comparative virtues and purposes of different kinds of map projections are explained.

c. Charts: Charts are among the most versatile and popular of visual aids because they are easily made, readily portable, and can shorten the time required to explain a difficult point in function or procedure or to

[5] Vernon F. Finch, Glenn T. Trewartha, Arthur H. Robinson, and Edwin H. Hammond, *Elements of Geography, Physical and Cultural,* 4th ed., McGraw-Hill Book Company, Inc., New York, 1957.

clarify an abstract idea. The various types of charts will be reviewed, with suggestions for their use. Construction detail is not the concern of this section. What is true of pictures and maps, however, is also true of charts and graphs. A few rules should be remembered, then, when choosing or making a chart: (1) It should be kept simple in detail and word usage. (2) It should clarify an idea or procedure that cannot be explained by the speech alone. (3) It should have clear, large, bold, uncrowded letters and lines for easy visibility. (4) It should be large enough for all to see it easily. (5) It should be an *accurate* representation, if real objects or facts are depicted. (6) Color should be used only to highlight important points—and never more than three colors should be used. (7) It should be carefully made, not thrown together. (8) It should be sturdy, possibly with protective covering to withstand reuse. (9) It should be easily portable.

Before you select one of the types of chart described below, you should ask yourself: (1) Do I need a chart, or indeed, any visual aid? (2) How many charts or aids do I need to clarify my subject? One may be sufficient, sometimes three or four may be required. (3) Which chart will do the best job for me?

(1) Strip-tease Charts: This form of chart is one of the simplest to make. Usually, the speaker will have a number of points he wants to impress firmly upon his audience's minds. Even the most skilled orator cannot always be certain that his audience has heard distinctly and *remembered* his main points. It is well known that words may often, particularly in rooms with poor acoustics, be mistaken for words which have similar sounds but different meanings. To avoid misunderstanding and to gain greater emphasis, the speaker may state his main points, perhaps three or four, on a chart. These lettered statements will then be covered with strips of plain paper, preferably of the same color as the chart board, and secured with Scotch tape or adhesive cement. When the speaker introduces the first point, he can easily strip the first piece of paper from the chart. The statement of this point stands clearly revealed. The group can read it and print it in their minds. When the speaker comes to the next point, he removes the second strip of paper, and so on, until he has finished. The strip method has the big advantage of keeping material from view until it is ready for use. In military briefing situations, strip-tease charts are often used to stress steps in procedure.

(2) Window-shade Chart: Another simple, inexpensive form of chart, this permits a speaker to conceal the entire chart and unroll it all at once, or to unroll it point by point, much as the strip-tease chart is used. As the name indicates, the chart is simply painted on an old window shade. This principle can be expensively elaborated upon, as in school map cases, where as many as ten maps may be stored on spring rollers for ready use. They can be pulled down, like window shades, when needed, and quickly returned to the case. In situations where a large number of charts are in frequent use, this can be an economical and convenient way to use the charts. It makes them readily available, and they can be easily stored. It also gives the maximum protection when the charts are not in use, to prevent their fading, aging, or soiling.

(3) Genealogical Chart: This type of chart is not restricted to depicting family trees, as the name might imply. True, it can be effective

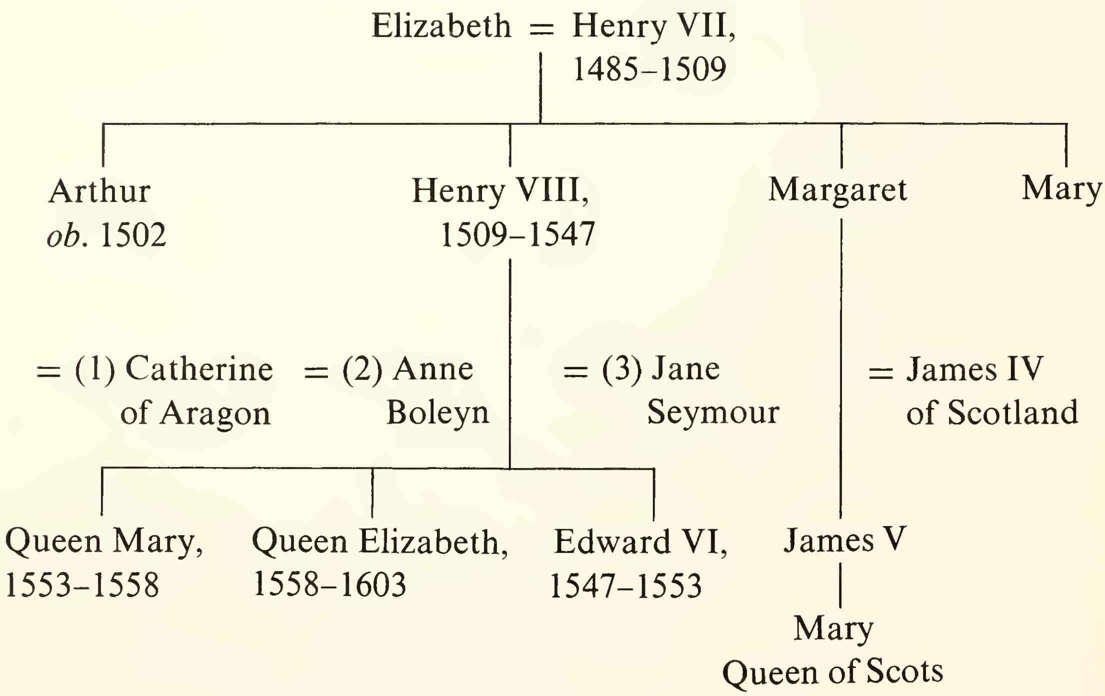


FIGURE 2–8. Genealogical charts, such as this one, showing the reigns of the Tudors, can help audiences to visualize and remember relationships. Without aids like this one, groups often become confused over the Henrys, Annes, Janes, Marys, and Jameses.

in showing the family lines of descent, but it can also be used to show descent in organizations or to show the various materials—parentage—which make up a product. Its primary purpose is to locate individuals or objects in relation to the individual or object which is the center of attention on the chart. The usual device of family names sprouting out of a many-branched tree is well known, but there are other methods of depicting these relationships. Simplest is a schematic tree with bold black lines to indicate the pattern of descent.

(4) Time-sequence, or Historical, Chart: Such charts are useful in showing relationships over a period of time, which may be seconds or centuries. The growth and development or changing condition of a nation, organization, or individual can be shown pictorially, as in some educational charts which have symbols marking dates of battles, inventions, and elections. This kind of chart is frequently modified for presentation in the form of a graph.

(5) Table of Organization or Rank Chart: By means of a system of squares or rectangles, connected by lines indicating the relationship between the various offices, sections, or jobs, this chart can show the audience at a glance the hierarchical structure or the division of work in a given organization.

(6) Data or Table Charts: An enlargement of a railroad timetable or a chart listing temperature-humidity readings is a good example of such charts. Owing to the usual complexity of the material, it is often advisable to digest the information for presentation in graph form for greater clarity and impressiveness.

(7) Progress Charts: Such devices show gains and losses, perhaps among a group of subjects. Like data charts, these can be quite complex and are usually more understandable if translated into some kind of graph.

(8) Cause-and-Effect Charts: In words, in symbols, or in real pictures, such charts make the relationships of cause and effect vivid. An effective chart for a lecture on safe driving might show some bottles of alcohol joined by plus signs to a driver and an automobile. After an equals sign or arrow, another picture could show a wrecked car.

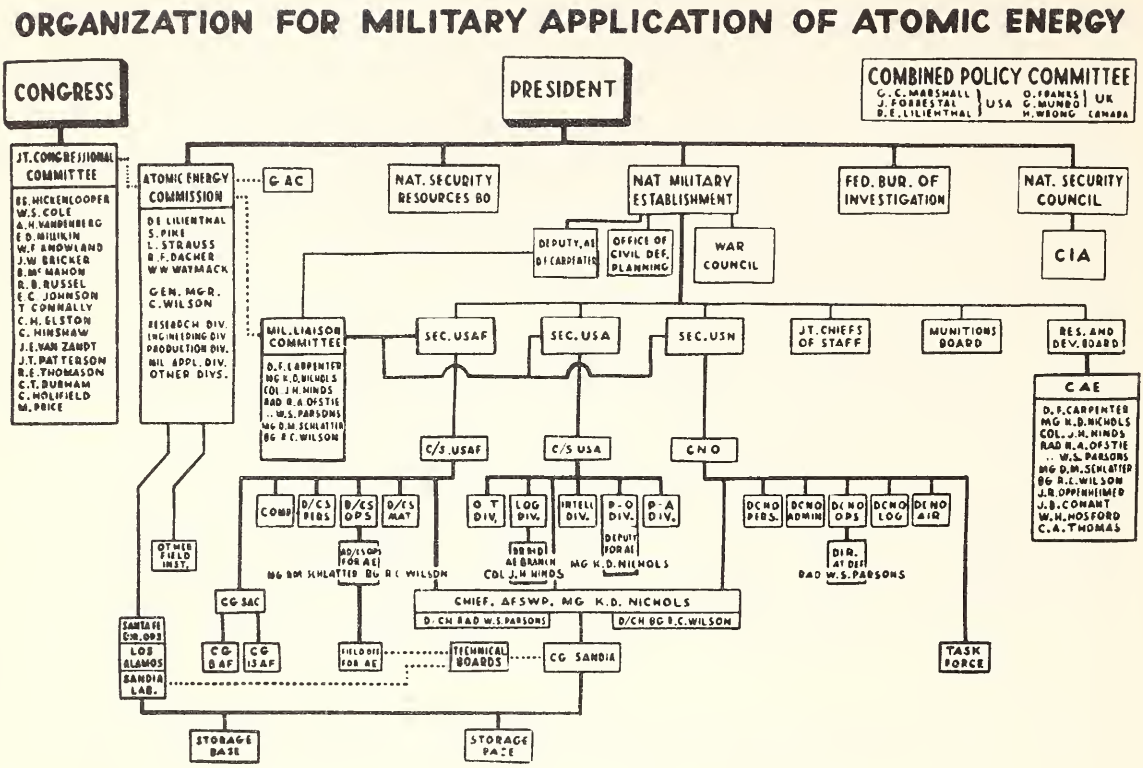
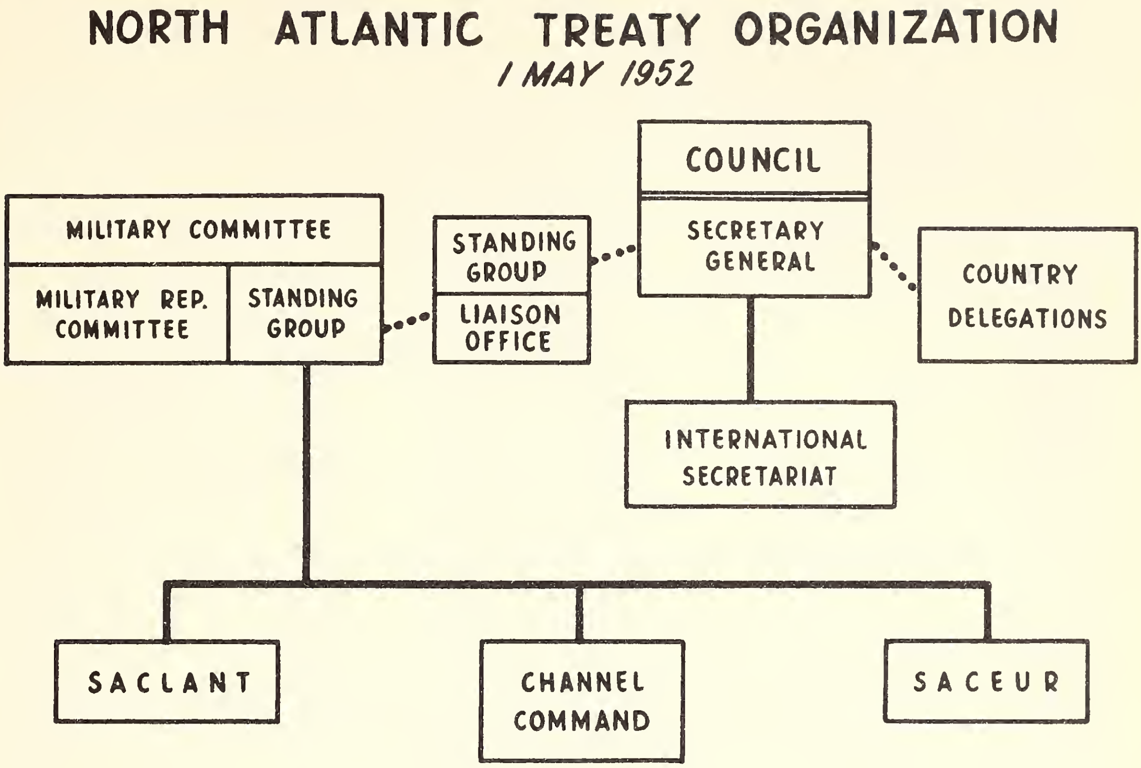


FIGURE 2–9. Organizational charts are often needed to clarify points in public speeches, briefings, and conference discussions. A chart which has too much detail, too much decoration, and too little coherency will do more harm than good. The chart above is needlessly complex. Compare it with the simplicity, impact, and careful organzation of the one opposite. (From *Visual Aids,* a National War College publication. Used by permission.)

(9) Flow Charts: There are at least two forms of this chart, which is designed to show relations of the parts to the finished whole or to the direction of movement. In the first, arrows and pictorial symbols may be used to show how iron ore, for example, "flows" through the various stages leading to its emergence as a new automobile. In the second, lines and arrows may be used to show traffic movement laid over a skeleton plan of a factory, a home, a school, an airstrip, a seaway, a battlefield, or a network of roads, or what steps must be taken in a process such as putting a bill through Congress.

(10) Inventory Charts: Occasionally, the speaker may find that listing objects or articles on a strip-tease chart will not be very effec-



tive. Instead, he may depict or symbolize these things on an inventory chart to make a more vivid impression. Seeing the parts of a soldier's uniform will be more valuable than reading a list of the items of issue.

(11) Diagrammatic or Schematic Charts: This class of chart, by means of simple line drawings, reduces complex natural objects, machinery, processes, or sequences to their essential elements. The method of depiction is symbolic rather than realistic. Radio-wiring diagrams are examples of such charts.

(12) Dissection Charts: Here, "exploded" pictorial or outline depictions will be used to show the relationships among objects which are ordinarily so closely placed, so concealed, or so small that the relationships are unfamiliar to the group.

Some forms of these charts attempt to show relationships and functions of organisms not visible to the human eye—exploded, transparent, or cut-away views of the mechanism of the human body or of an engine, or the workings of a factory. In the exploded view, a picture or drawing may show a dismantled motor with

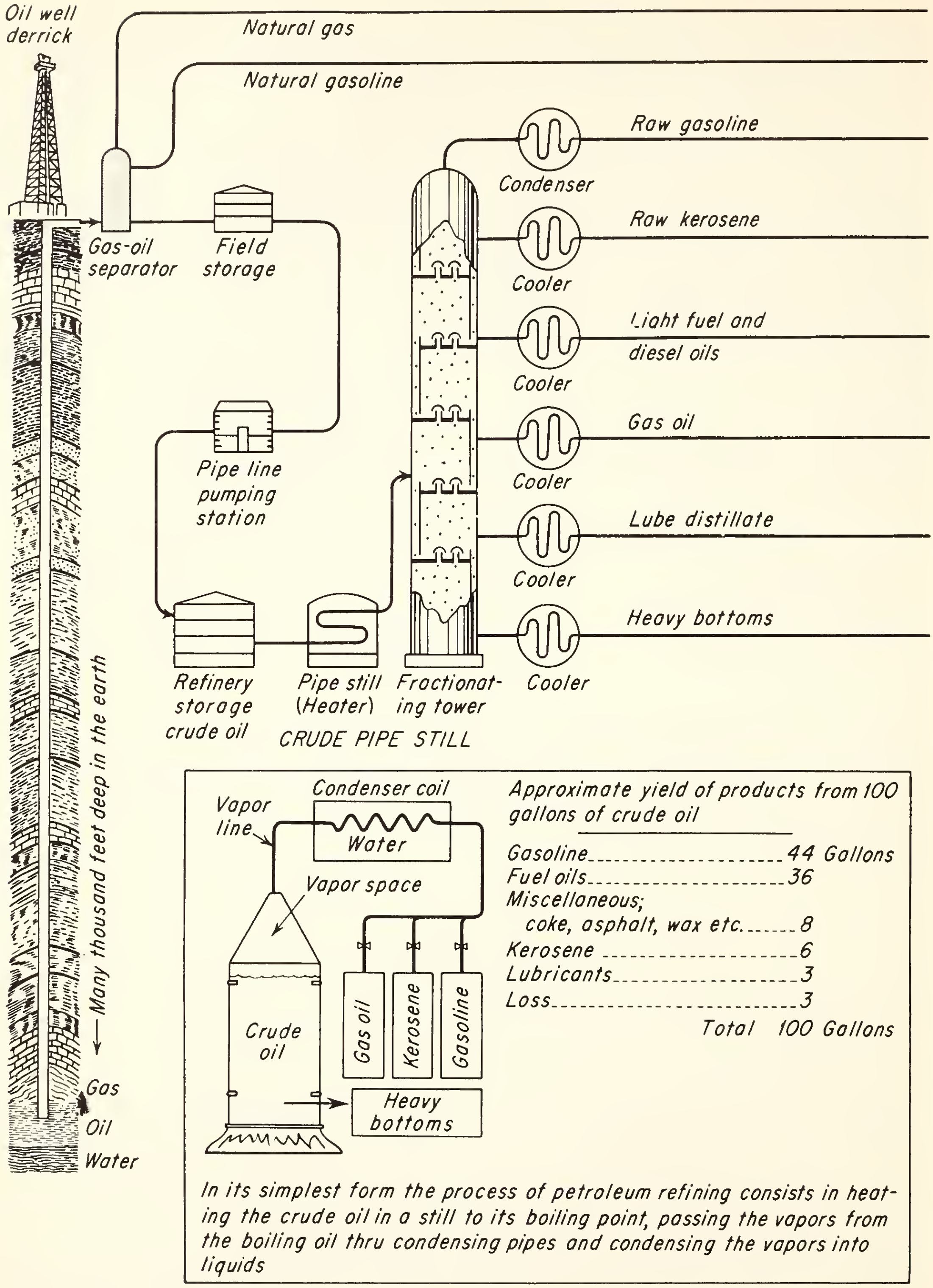
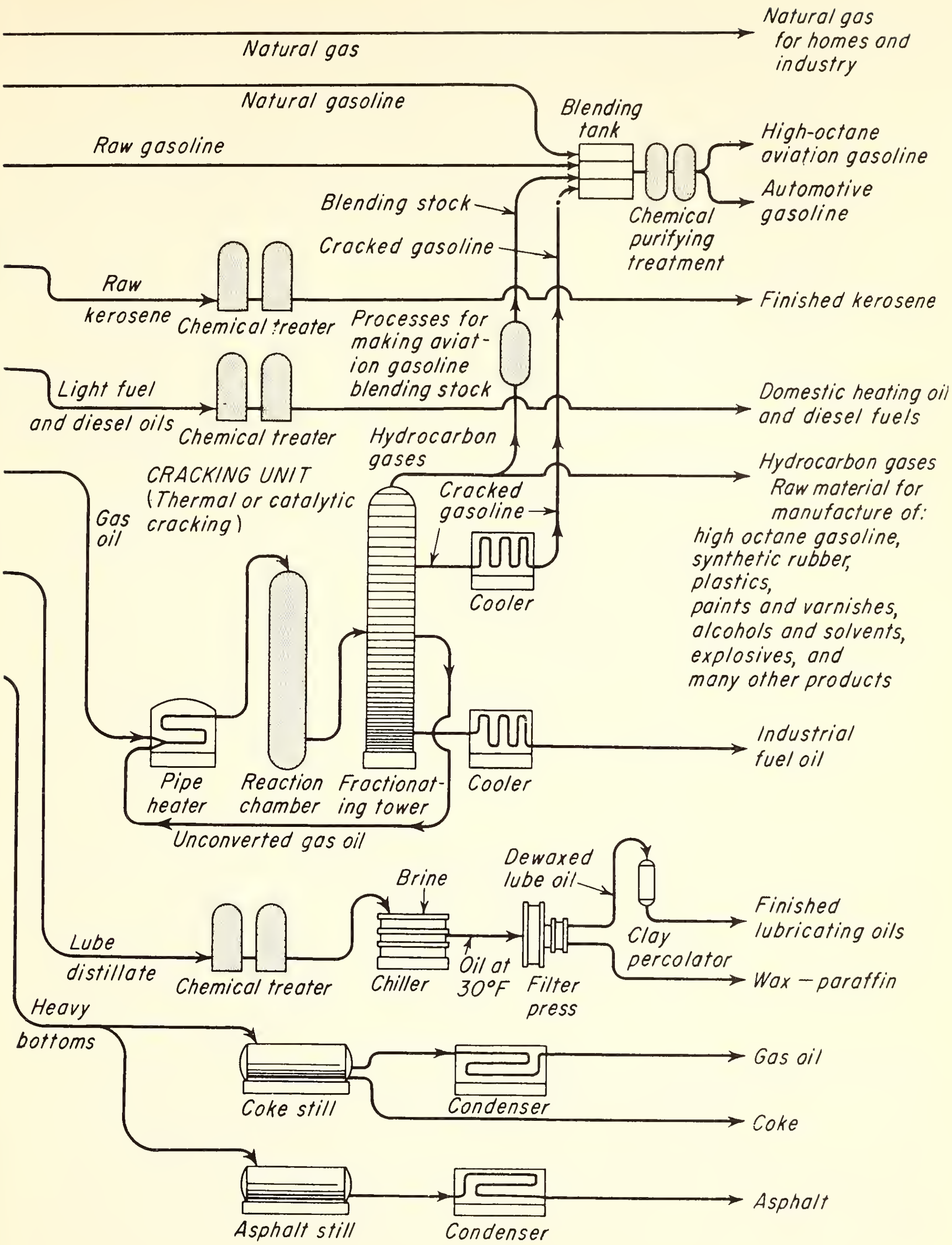


FIGURE 2–10. Flow charts can show the development of a product or the steps in a process from raw materials to the finished article. Though this diagram of the crude-oil refining process is too complex for most speech situations, it illustrates



steps in the process and interrelationships more clearly and more easily than many speakers could. (Courtesy of American Petroleum Institute.)

every part down to the last screw suspended in air in proper relation to all the other parts. The transparent dissection may, by means of shading, show an interior, or the chart may actually have layers of cellophane or acetate with depictions of objects or materials to be found on each layer as the dissector proceeds downward or inward. Cut-away views show a portion of the in-

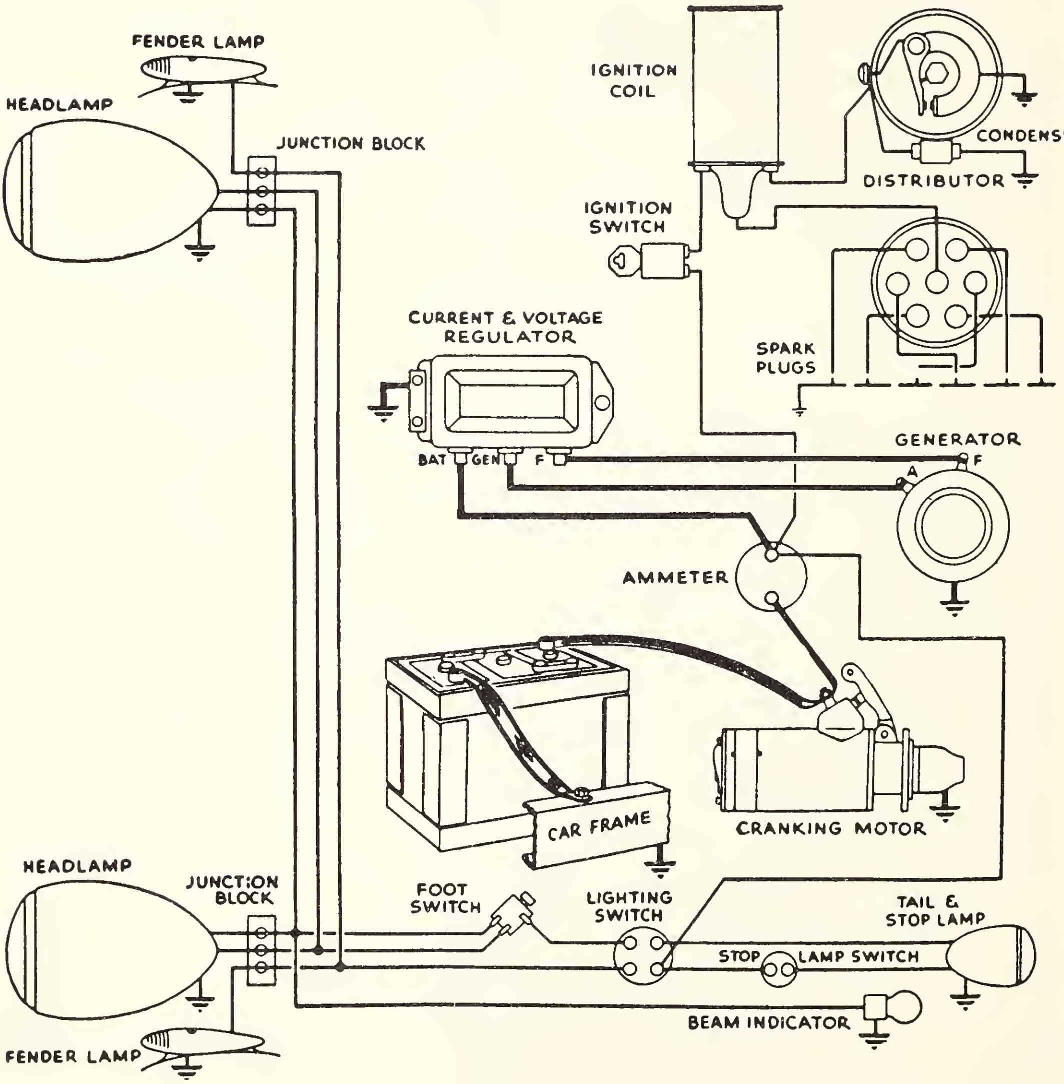


FIGURE 2–11. Diagrammatic and schematic drawings often help clarify complex relationships. Here a typical automotive electric system is illustrated. Drawing main units realistically helps novice audiences to identify the parts more readily. Advanced groups usually find that symbols are adequate for representing conventional units. (From W. H. Crouse, *Automotive Mechanics,* 3d ed., McGraw-Hill Book Company, Inc., 1956. Courtesy of United Motors Service.)

terior in relation to the exterior. Some charts of this kind have a series of pictures showing successively greater removal of the exterior and penetration of the interior.

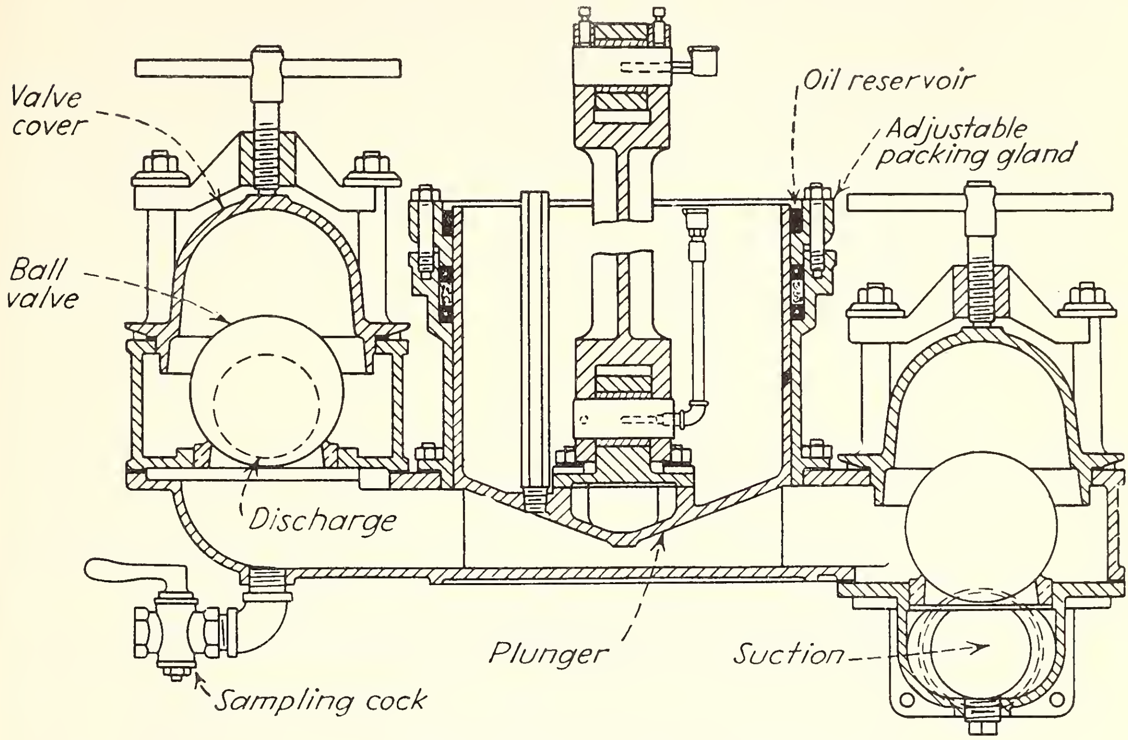


FIGURE 2–12. The internal operation of such varied machines as the human body and combustion engines must frequently be shown. Dissections, exploded drawings, and cross sections are useful methods of showing structure-function relationships. Here a single-plunger sludge pump with ball valves is shown in cross section. (From F. A. Kristal and F. A. Annett, *Pumps,* McGraw-Hill Book Company, Inc., New York, 1953. Used by permission.)

d. Graphs: Although graphs are, properly speaking, chart forms, the degree of specialization and the variety of possibilities for presentation which they offer make them worth a separate discussion. This discussion is largely based on work done for the U.S. Air Force Human Resources Research Institute by Lewis Peterson of the University of Illinois Division of Communications.[6]

Increasingly, facts are being presented in business, education, science, and the military in terms of statistics. Long tables of figures are often difficult for a reader to comprehend. How much more difficult

[6] Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials.* Research Memo No. 14 (Maxwell AFB, Alabama: Human Resources Research Institute, published by University of Illinois, Urbana, Ill., 1953).

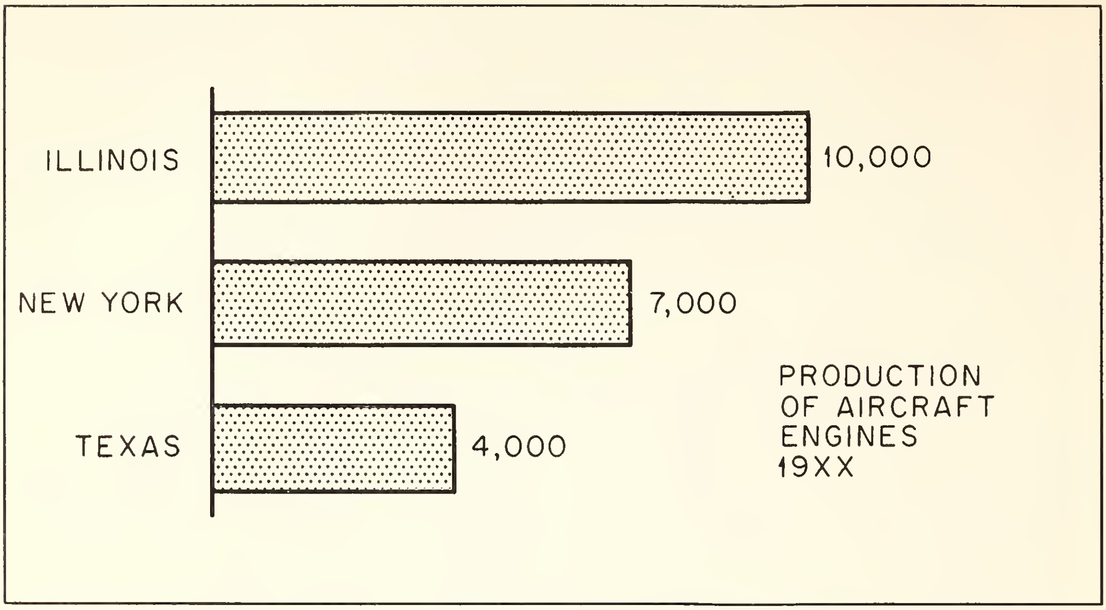


FIGURE 2–13. The bar graph is useful in showing simple comparisons. Here figures for the production of aircraft engines in three states are compared. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

to understand, then, are statistics which a speaker may quote to a conference group. Graphic aids will help a speaker to clarify size, positional, or quantitative relationships symbolically. In deciding what can best be shown on a graph, a speaker should consider the following rules: (1) Use facts that can be visualized; abstractions cannot be graphed. (2) Use only the facts you want to emphasize—the other facts, if not necessary, will only distract. (3) Use the facts you want the listener to pay attention to and remember.[7]

The criteria previously listed for other two-dimensional visual aids apply here also. Graphs should be *visible,* clearly lettered, simple, well organized, and carefully made. In using a graph, remember that it should be used only as an aid. It should help you; you should not have to use your entire time explaining the graph. In addition, it should be appropriate; that is, an amusing pictorial graph should not be used with a very serious speech.

To make the graph easy to read, be wary of misunderstandings caused by distortion in symbols. Air Force researchers have found three sources of such distortion: (1) Perspective drawing in compari-

[7] *Ibid.,* pp. 6–7.

son graphs gives viewers a false concept of quantity. *Show comparisons straight on.* (2) Variation of lines and bars in more than one dimension may give viewers an erroneous idea of area or volume. *Vary lines and bars in one dimension only, length or height.* (3) Confusion in representation of kinds of things compared may lead onlookers to contrast pounds with dollars, or miles with gallons. *Make the units agree.*

The excellent Air Force manual on use of graphs, cited in footnote 6, contains a thorough and easy-to-read treatment of the varieties of graphs and what they can do. The present discussion will be limited to a mere résumé of simple graphs which can be most effectively used in speech situations, particularly in briefings and conferences.

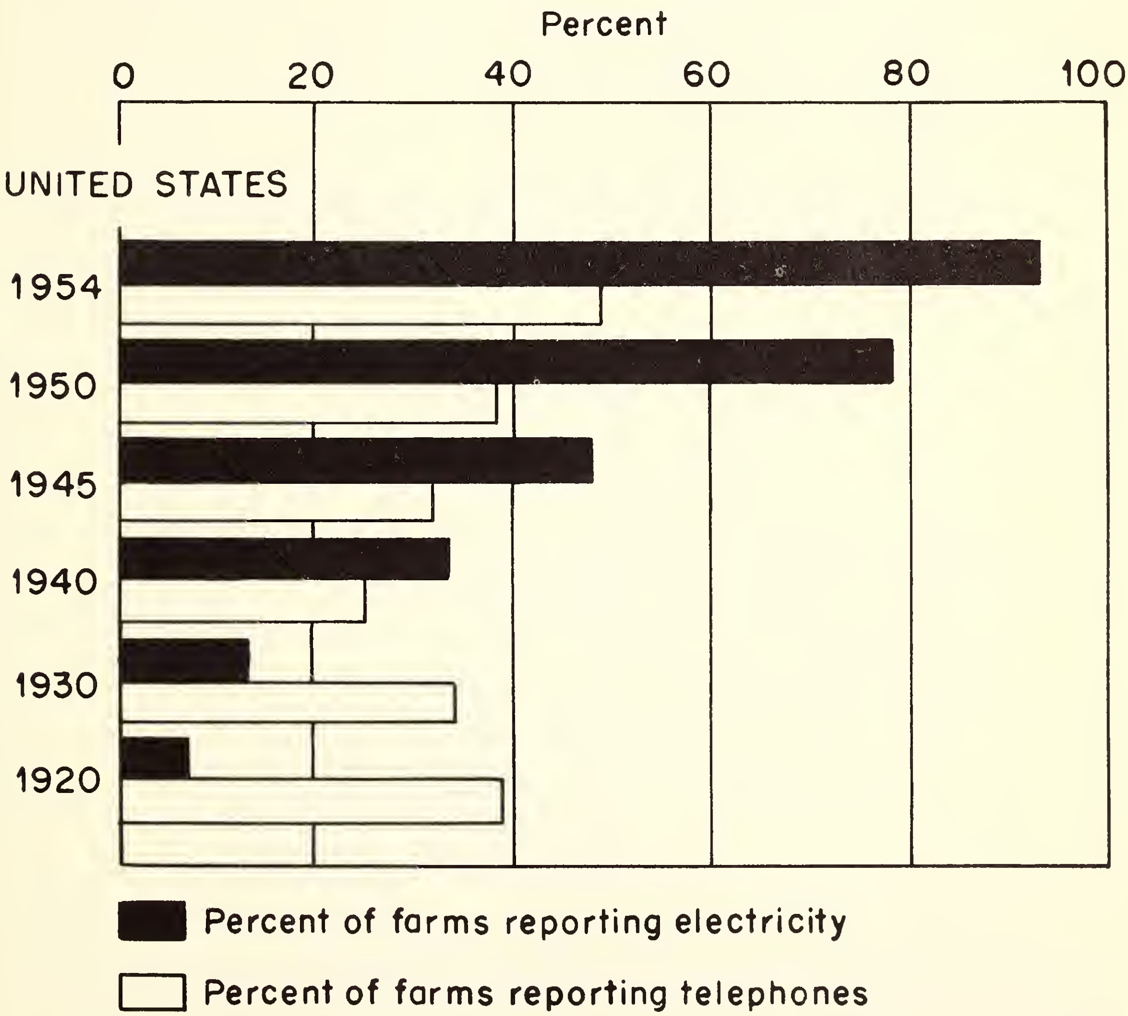


FIGURE 2–14. Multiple comparisons can be effectively shown with bar graphs. This graph shows the per cent of farms reporting electricity (black bars) and telephones (white bars) at intervals from 1920 to 1954. (Courtesy of U.S. Department of Agriculture.)

(1) Multiple-bar Graphs: (See Figure 2–13.) It does not matter whether the bars run horizontally or vertically, but traditionally altitudes should rise and distances should stretch from side to side. Be guided by custom when adapting statistics to such a graph.

Simple comparisons such as the relative populations of several states can be easily shown on a multiple-bar graph. The height or length of each bar represents a quantity, such as gallons of oil, hours of flying time, or temperature readings. The items compared on any one bar graph should be comparable. Do not put a bar representing 10,000 pounds of mangols next to a bar representing 2,000 hours of employee absenteeism. For clarity, bars should be limited to three or four in number. Too many items will dull the effect of the aid. Unless extreme precision of reading is desired, don't draw bars against a grid scale. This only adds more distracting detail.

Multiple comparisons (see Figure 2–14) may also be shown. If the speaker wishes to compare the income of California, Washington, and Oregon in terms of agriculture and industry, he could use black

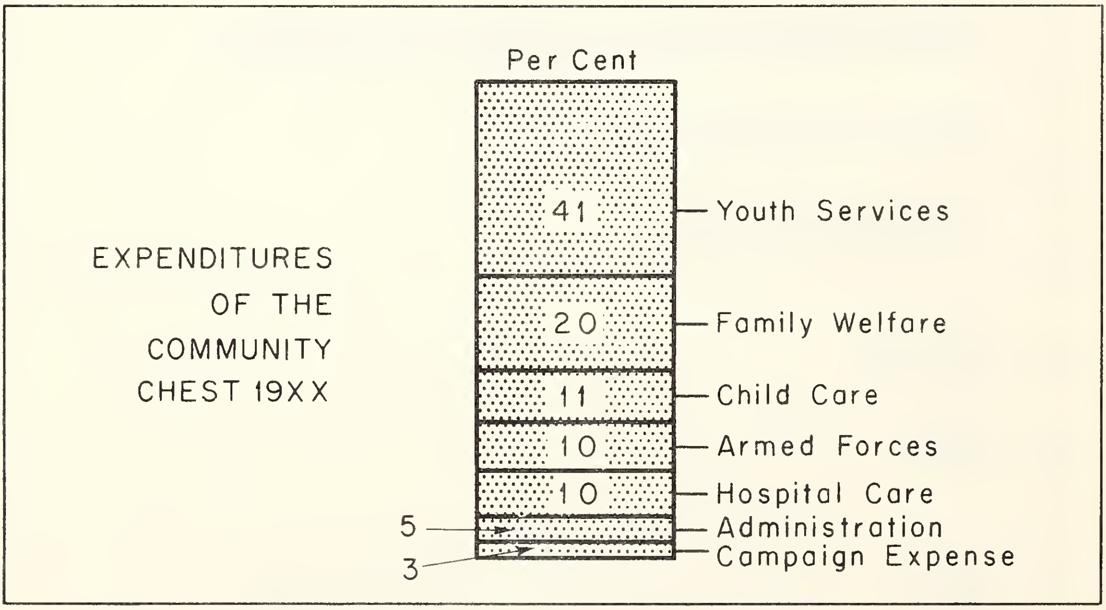


FIGURE 2–15. The divided bar graph is one way of showing the relationship of the parts to the whole. The whole bar stands for 100 per cent; each division represents a certain percentage of the whole. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

bars for agriculture and white bars for industry, putting them side by side.

Loss and gain comparisons can be made with black bars to represent gain and white to represent loss.

(2) Divided Bar Graphs: (See Figure 2–15.) Such graphs are best for showing the *relation of the parts to the whole.* The whole bar represents 100 per cent and is divided into parts by lines, shading, or color. A bar might represent total output of United States automobiles last year. Its divisions could reveal the percentage production by various firms.

(3) Divided circle graphs: (See Figure 2–16.) These graphs serve the same purpose as the divided bars. They show the *relation of the parts to the whole.* A most familiar form is the pie graph, showing the division of the taxpayer's dollar in terms of government expenditures.

It is misleading to use circles for size comparisons, because viewers cannot accurately judge the area of circles of different sizes. If

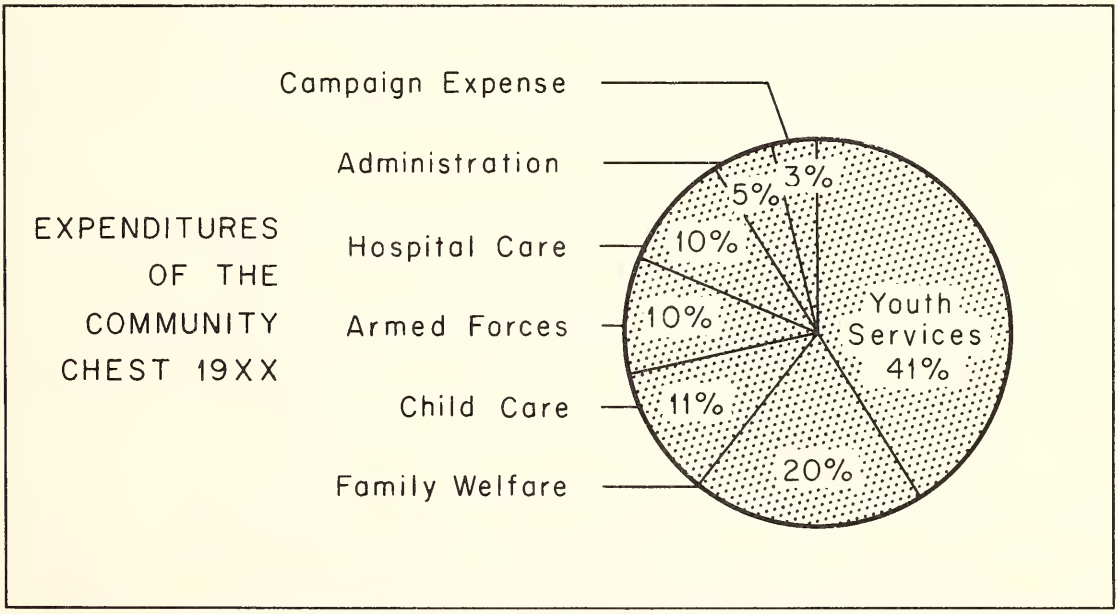


FIGURE 2–16. The same information shown in the divided bar graph (Figure 2–15) can be presented in a circle graph. Again, the total area represents 100 per cent. It is customary to begin the largest part at 12 o'clock and to proceed clockwise in descending order of magnitude. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

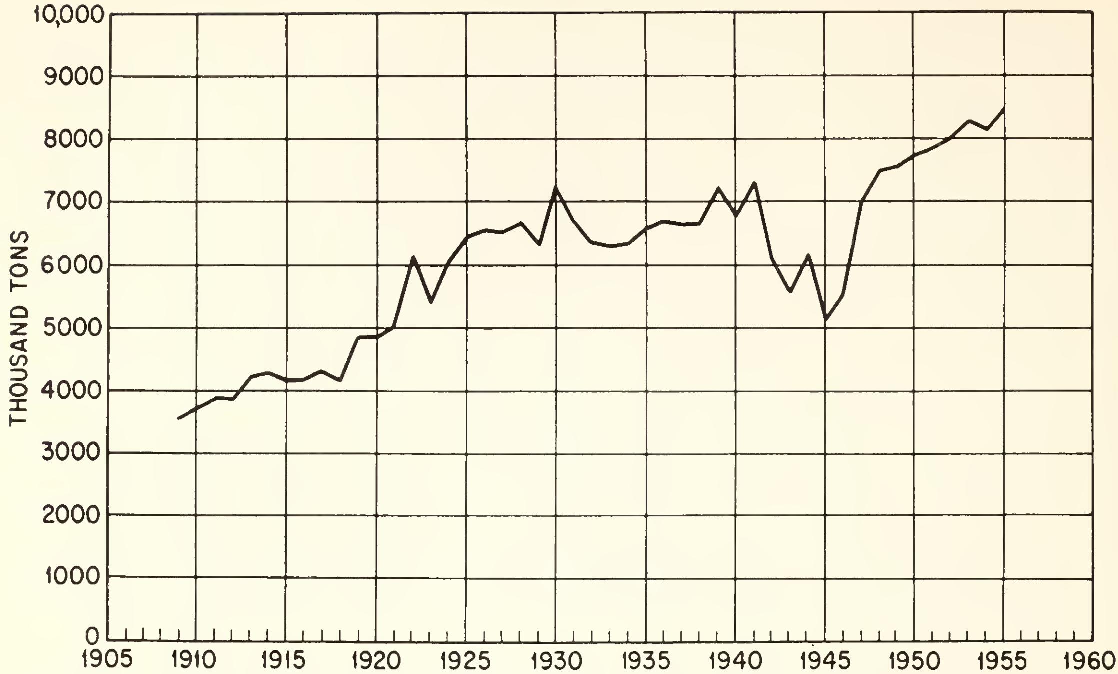


FIGURE 2–17. Simple comparisons are easily shown on a line graph. The yearly consumption of sugar in the United States is shown here in thousands of tons from 1905 to 1955. Note that the years are charted along a horizontal line from left to right, rather than vertically from top to bottom. (From E. B. Alderfer and H. E. Michl, *Economics of American Industry,* McGraw-Hill Book Company, Inc., 1957. Courtesy of U.S. Department of Agriculture.)

two circles are made the same size to represent 100 per cent, one may actually represent a herd of ten cattle and the other might represent a herd of a thousand cattle. Here quantity is again distorted. Avoid circles in which the pie wedges are exploded, or separated. The space between the wedges may vary, giving false impressions of relative size.

(4) Line Graphs: (See Figure 2–17.) *Simple comparisons or frequency* can be shown on such a graph. Time sequence can be plotted along the horizontal scale and quantity along the vertical scale. A single line could, for instance, show the number of loaves of bread made by a bakery during the year, on a daily or a monthly basis.

Multiple comparisons (see Figure 2–18) can be made in the same way, using different kinds of lines—unbroken, broken, dotted, double—to contrast the output of several bakeries. Colored lines are also effective. Care should be taken not to get too many compari-

sons on one graph. Ordinarily, do not try to compare loaves of bread with bottles of milk. The compared unit should remain the same.

Loss-and-gain comparisons can be made with the line graph also. The profit and loss graph of large industries has become a commonplace of American cartoon humor. This device is excellent for indicating trends. If the line representing sales continues to drop while the one representing expenses rises, the trend should be painfully obvious.

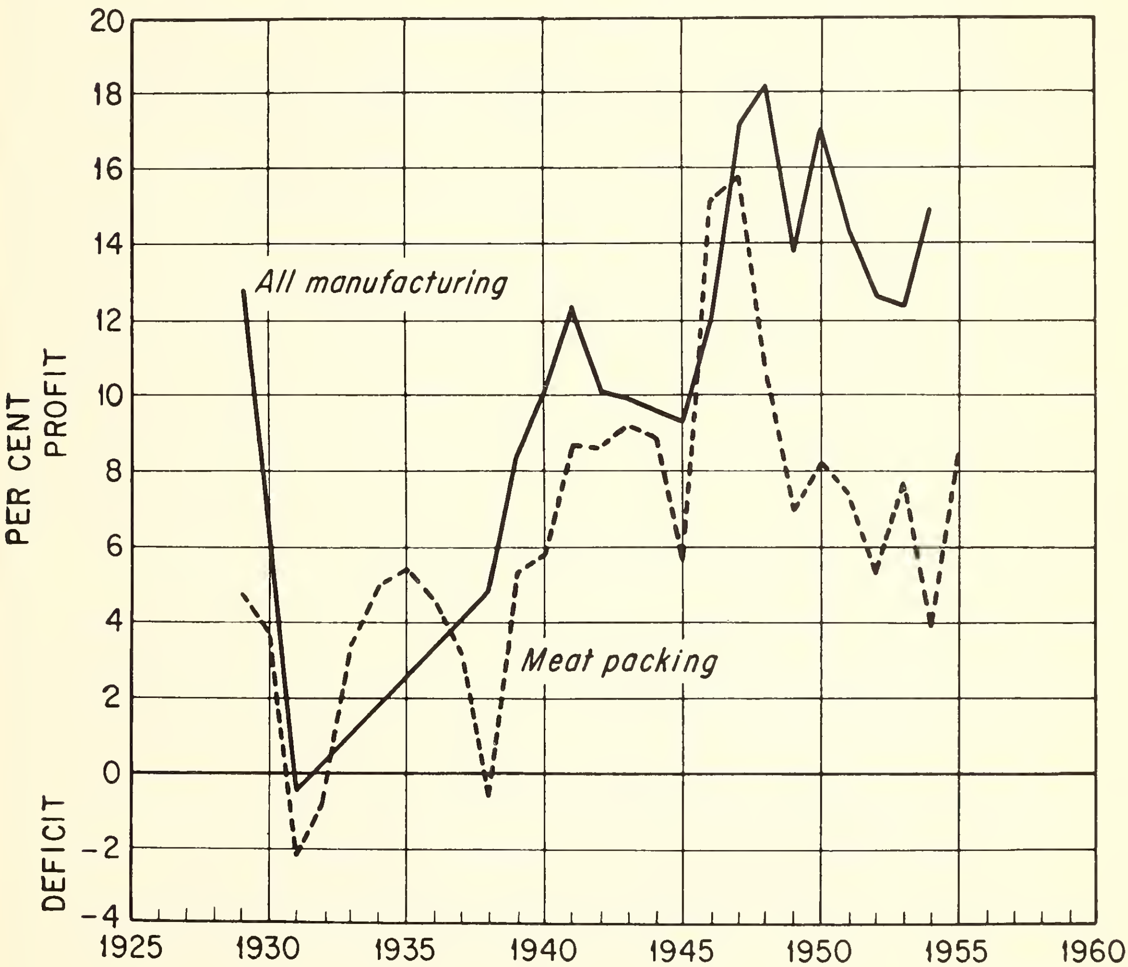


FIGURE 2–18. Multiple comparisons also show clearly on line graphs as long as one does not try to put too many comparisons on one graph. Here profit on net worth after taxes in the meat-packing industry is compared on a yearly basis with profit in all manufacturing. (From E. B. Alderfer and H. E. Michl, *Economics of American Industry,* McGraw-Hill Book Company, Inc., 1957. Courtesy of U.S. Department of Agriculture and American Meat Institute.)

(5) Cosmographs: (See Figure 2–19.) The *relation of parts to the whole* is effectively shown by the cosmograph. A complete cosmograph will show all the parts of the *input* feeding into a solid band, representing the whole. Out of this band will come branches, representing all the parts of the output. The partial cosmograph is a band, representing the whole, divided into branches proportional to the various parts. It represents only input or output, not both.

(6) Composite Bar Graphs: (See Figure 2–20.) *Multiple comparisons* and *loss-and-gain comparisons* can be shown by this method. Effective contrasts can be made when all bars are of equal size, representing 100 per cent. The gains and losses or the varying amounts composing the whole can be seen accurately, but the uniform size of the bars hides the fact that there are differences in quantity between the things compared. When the bar length corresponds to the quantity (see Figure 2–21), then the comparison is more vivid, though it is often difficult to compare the quantity of the various kinds of things which may make up the whole bars.

(7) Pictographs: (See Figure 2–22.) Using some simple, conventional, pictorial symbols, the pictograph proves valuable in establishing

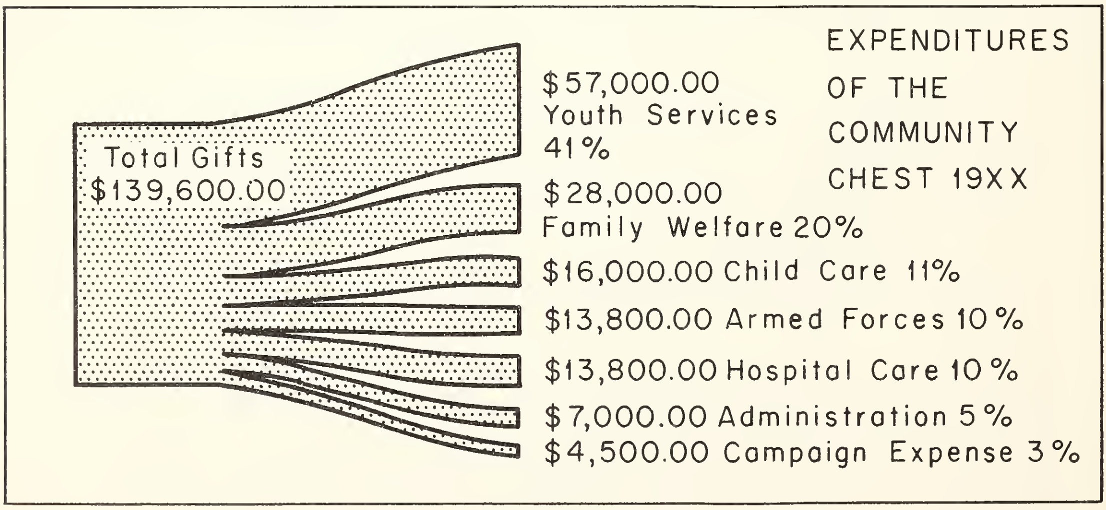


FIGURE 2–19. The cosmograph is a third way of showing the relationship of the parts to the whole. The figure above is a partial cosmograph. If the sources (broken down by percentages) as well as the expenditures of the fund were given, it would be a complete cosmograph. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials*, Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

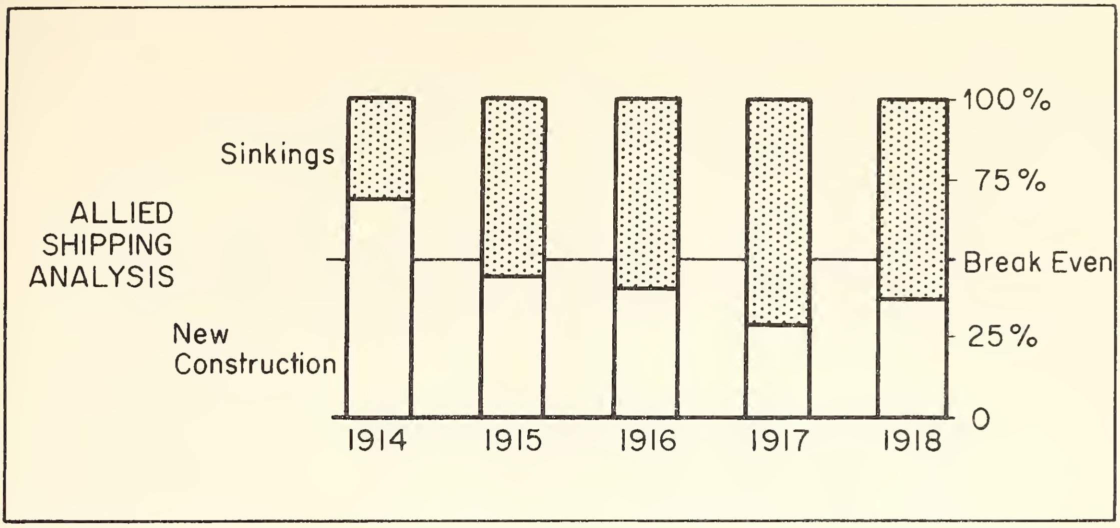


FIGURE 2–20. In the composite bar graph, which is useful for showing multiple comparisons and loss-and-gain relationships, bars are divided to show percentage relationships and compared with other bars to show the change in this percentage balance. Here each bar is the same size and each represents 100 per cent. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

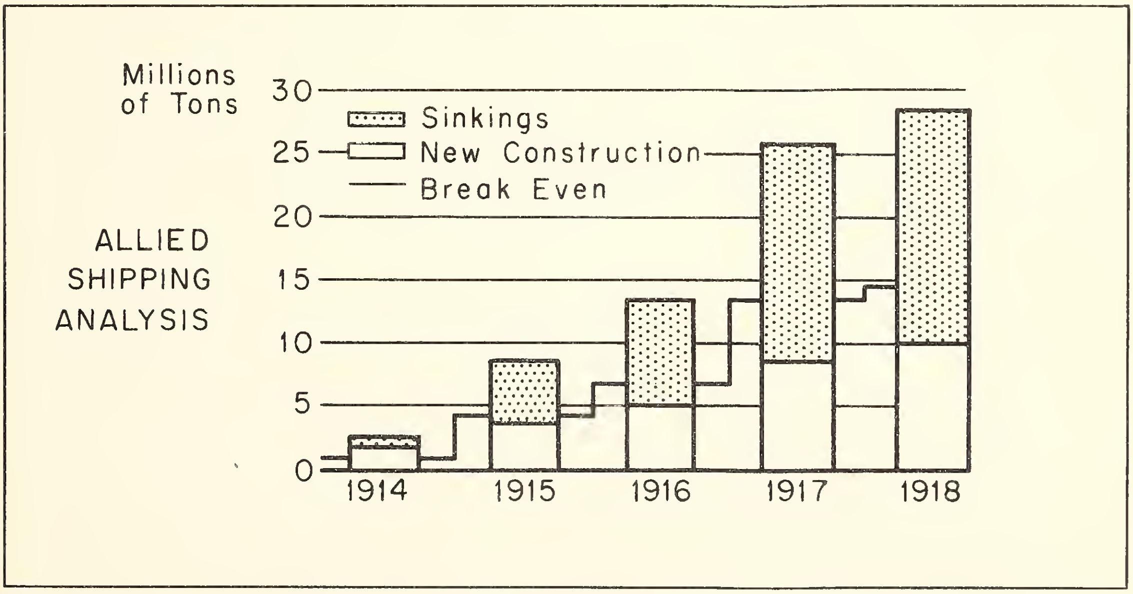


FIGURE 2–21. A composite bar graph can also be drawn so that each bar indicates the actual quantities involved. In the example given here of the numerical scale graph, tonnage, rather than percentage, of ships sunk is compared to that of ships constructed, and the bars, therefore, vary in size. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

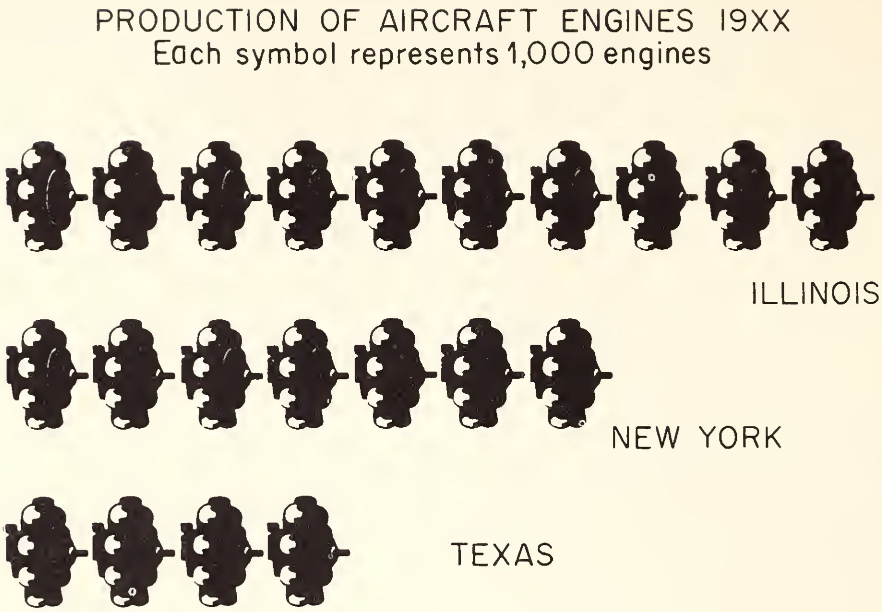


FIGURE 2–22. In a pictograph a simple symbol represents a given quantity of an item, in this case aircraft engines. Sometimes the data require the use of a fractional symbol, which can be a disadvantage, since it is not always possible to translate this into exact numerical terms. (From Lewis V. Peterson, *Use of Graphs in Air Force Teaching Materials,* Air Research and Development Command, Human Resources Research Institute, Maxwell Air Force Base, Alabama, August, 1953. Used by permission.)

simple comparisons and *loss-and-gain comparisons,* and in showing the *relation of the parts to the whole.* A symbol, such as a car, might represent 10,000 cars. On the pictograph, it would be possible to compare the number of cars in Texas with the number of those in Massachusetts in a simple, vivid manner. Fractions of the unit chosen are shown by fractions of the symbol. In loss-and-gain comparisons, the symbols for gain must be altered slightly in color or shape to distinguish them from the symbols for loss. An effective pictograph for a part-whole analysis would be a stack of coins with groups of coins representing yearly wages slightly out of line with the others in the stack to identify them variously as clothing, housing, food, medical expenses, entertainment, and savings.

4. AIDS IN THE REPRODUCTION OF VISUAL AIDS: Though the chalkboard, opaque, still and motion-picture projectors can aid the speaker visually, they are only methods of reproducing the types of visual aids which have been just reviewed. There are, however, some rules for their use which speakers should know.

a. The Chalkboard: One of the oldest of the visual aids, the blackboard, as it was long called, today is often neither black nor board. It may be made of slate, glass, wood, or metal. It may be black, gray, or various shades of green or brown, supposedly easier on the eyes than black.

The virtue of the chalkboard is that it enables the hard-pressed speaker to draw his own pictures, cartoons, posters, maps, charts, and graphs right on the spot. If he has no particular talent at freehand drawing, he can use stencils or templates to trace outlines. If he wishes to use maps, he can employ the projection method of tracing or the block method of enlargement discussed under Maps.

There are also a number of rules, angles, and compasses made especially for chalkboard use. One well-known device holds five pieces of chalk in such a way that the speaker can draw an enlarged music staff on the board. Altering the position of chalk in the holder, the speaker can also draw evenly spaced lines for lettering purposes.

An accurate circle can be drawn with a string tied to a piece of chalk. Marking off the proper radius, the drawer puts his thumb on the free end of the string, using this as a pivot point. He then pulls the string taut and moves the chalk around the pivot, carefully describing a neat circle on the board. With chalk on a string and using the horizontal or vertical edge of the board, he can draw straight lines or make grids.

In addition to being able to improvise unobtainable visual aids on the chalkboard, the speaker can use the board for extra drawings and sketches as explanations incidental to complex points in his speech or to other aids. This is quick, economical, and convenient, and the drawings and sketches are easily removed so that the board may be used for further visual work.

Here is a list of rules for effective use of chalkboards.

(1) The board, erasers, and chalk tray should be thoroughly cleaned before the briefing or conference session. The board should be

washed or carefully erased. The erasers should be dusted. The chalk tray should be free from dust. Avoid cracked or warped boards.

(2) Ample chalk and erasers should be conveniently located, preferably in the chalk tray or on the speaker's stand. A pointer should also be available.

(3) Any rulers, templates, or stencils should be convenient for use but not placed where they can distract attention.

(4) If possible, skeleton outlines of drawings and stencils may be faintly traced on the board before the speech. The fine lines cannot be seen by the audience. When ready, you can trace boldly over the sketching—and amaze the audience at your familiarity with the visual aid you are drawing.

(5) The board should be well iit, but not in such a way that the light bounces off it, preventing the audience from seeing what is written.

(6) The board should not be obscured by tables, chairs, stands, *or* by you, when the audience is supposed to see what is on it.

(7) When possible, you should try to use the board without turning too far away from the group. You should always avoid turning your back on your audience. This destroys speaker-audience contact and also effectively blocks any visual aids on the board.

(8) In explaining a visual aid on the board, stand away from it, facing both the audience and the board. You may use the pointer to indicate interesting details.

(9) You should be well rehearsed so that you do not fumble in drawing or explaining the aids.

(10) Print; don't write longhand. Let your audience be able to read what you are printing.

(11) Drawings and lettering should be large enough and bold enough in stroke to be seen clearly; they should be kept *simple;* they should have ample room, free from crowding; they should look neat and orderly; they should be firm and clear in outline, not sketchy.

(12) Lettering should be uniform, free of decoration, evenly spaced, on lines parallel with the bottom of the board, and large enough to be *read.* You may have to check this beforehand.

(13) Words should always be spelled correctly.

(14) Variety and stress may be added to drawing and lettering by using outline form, capital and small letters, underlining, and colored chalk.

(15) When using colored chalk, choose colors which will *show* on the board. Use only one or two; don't turn the board into a Cinemascope production. Use colored chalk sparingly; it is more difficult to erase than white chalk.

(16) If possible, draw only one aid at a time.

(17) Above all, erase each visual aid as soon as you are finished with it. This removes a possible source of distraction, as well as preparing the board for the next drawing.

(18) As a courtesy to any speakers who may follow, always leave the board clean and the chalk, erasers, and pointers where you found them.

b. Opaque Projectors: Through a system of light-reflecting mirrors and lenses, opaque projectors are able to reproduce greatly enlarged images of objects, materials, small models, and printed matter in natural color. Thus, graphs, photographs, and text from books can be projected on a screen so that the entire audience can see them clearly. Objects such as coins, tools, and watches, and materials such as stone, glass, and cloth, can be easily enlarged. Maps, charts, graphs, cartoons, and sketches can also be projected. Most machines have 6- by 6-inch openings which will reproduce only what is immediately below the opening. Others have larger openings to accommodate 8½ by 11 inches. This does not mean that the picture or map need be limited to that size. It means that only a portion of the map can be projected at one time. Slides can also be projected with this machine. A variation, which is really a transparent projector, permits the speaker to write on a cellophane film, much as he might on a chalkboard. The material is then thrown on the screen much larger than it would be on a chalkboard—and more easily visible.

FIGURE 2–23. Opaque projectors make possible large-size reproduction of objects, materials, printed matter, and drawings. (Courtesy of Charles Beseler Company.)

The chief disadvantage of projection with the opaque, still, and motion-picture methods is that the room must be at least temporarily darkened to permit the images to be seen. In daytime this can be time-consuming and even irritating, if the blinds hamper good ventilation, making the room stuffy. At night, there is also a break in continuity, if the lights are switched off and on—few rooms are equipped with theatrical dimmers—for slides or short films. There will be periods when the audience cannot see the speaker at all. His voice will be a disembodied sound in the darkness. Then, suddenly, the lights will click on, and every one will blink at the brightness, readjusting to the illumination.

The least offensive way to use projection is with gradually dimmed lights or with a hooded screen, protected from room lighting. Projection actually is more suited to classroom instruction, where attention need not be continually directed toward the speaker. The danger in projection is that when the speaker disappears, the projected image may launch audience members on other trains of thought, unless the speaker's voice is authoritative.

Occasionally, the novelty of the opaque projector encourages users to go to great lengths to find all kinds of materials, objects, or drawings to reproduce. Ingenuity and variety are always to be commended,

particularly when they make formal speeches or classroom instruction more vital and effective, but excessive dependence on the projector may tend to distract from the real purpose of the speech. The projector should not be considered an entertainment device or an unusual toy. If that happens, the speaker may be accused of "showing off" the versatility of the machine, rather than illustrating his speech visually.

c. Slide and Filmstrip Projectors: The most commonly known examples of this type of aid are the 35-mm 2- by 2-inch color slides, and the black-and-white 35-mm 2- by 2-inch frame filmstrips which are the proud trophies of all tourists. 35-mm slides are latecomers to the scene, however. The old 3¼- by 4-inch "lantern slide," used for years in theaters and movie houses, is called "standard" to distinguish it from the 2- by 2-inch. The larger slides are best for use in large auditoriums. They are not, however, as easily made as the 35-mm slides, which the speaker can take with his own camera and which may later be slide-mounted by the film company. The larger slides are bulky and easily broken, owing to the glass plates on which the picture usually is preserved. The 2- by 2-inch can be enclosed in glass for durability, but usually is nothing more than the photographic film positive in a cardboard frame. Modern slide projectors, equipped with ingenious slide magazines, can automatically project a series of slides with a correctly timed interval allotted to each slide.

Filmstrips, usually black and white, but also available in color, are rolls of 35-mm film with a succession of still photographic images. The photographs can be of objects, pictures, maps, charts, graphs. Film-

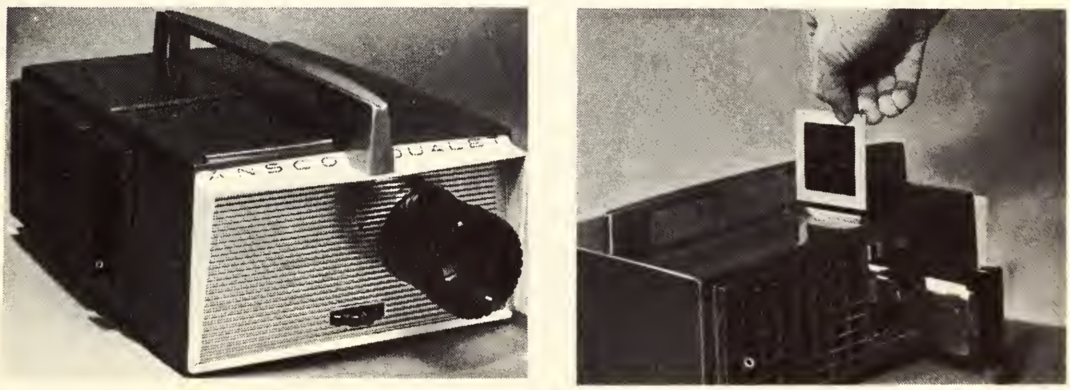


FIGURE 2–24. This Ansco slide projector (front and side view shown above) is one of many excellent portable machines. Inexpensive, easy to carry and operate, it may be used for commercial slides or 35-mm diapositives that the speakers themselves have made. (Courtesy of Ansco.)

strips are simple to use, compact to carry about and store, inexpensive, and maintain unvarying continuity of pictures on each strip. Slides can get out of order. On the strip, the frames stay as they were printed.

Both slides and filmstrips make possible impressive enlargement or reproduction. They are simple. The speaker can use them at his own speed—unlike motion-picture films—and he can turn back to another slide or frame for review. Unfortunately the audience must usually be plunged into darkness or dusk when these aids are used. If the audience needs to take notes on the speech, it will be almost impossible to do it in the dark.

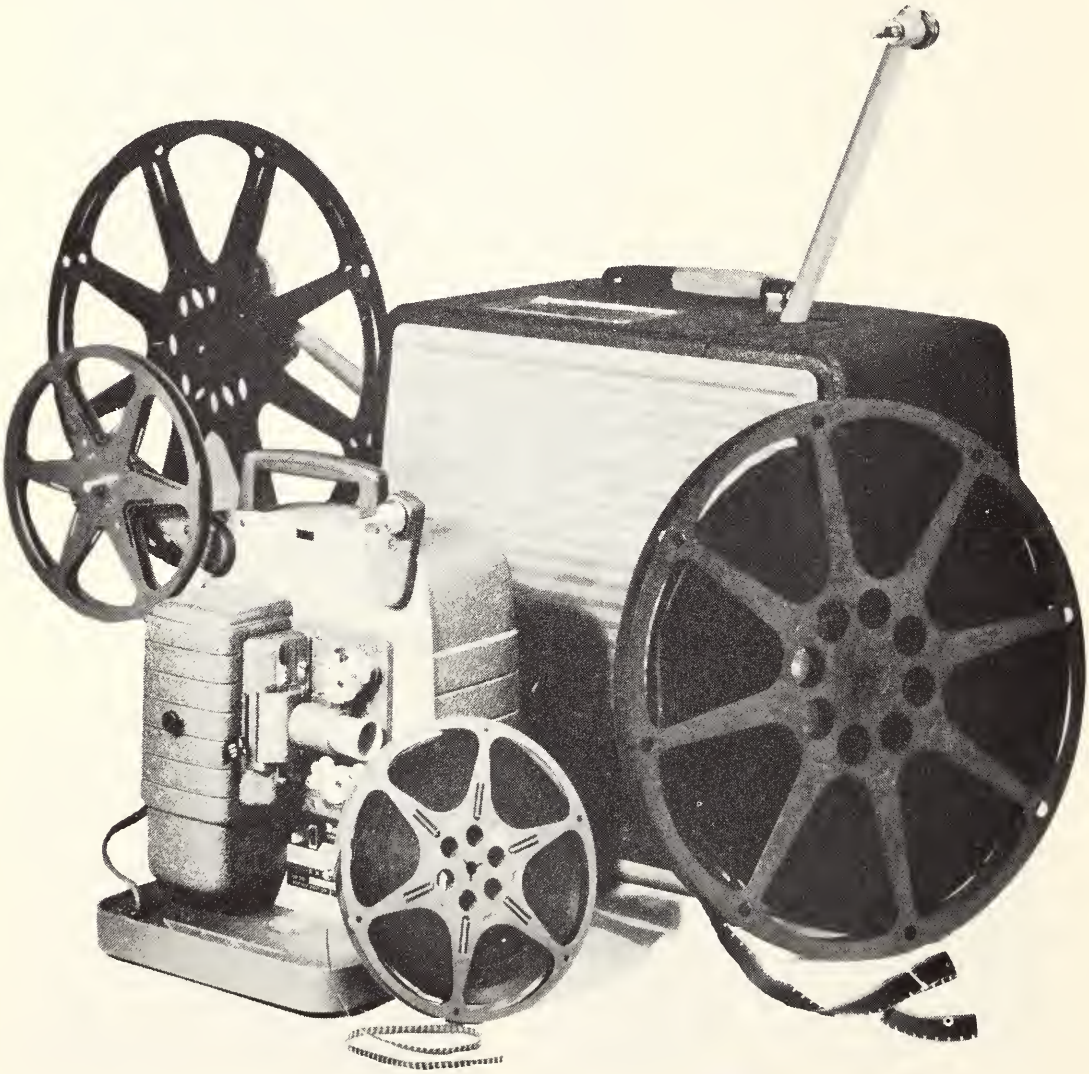
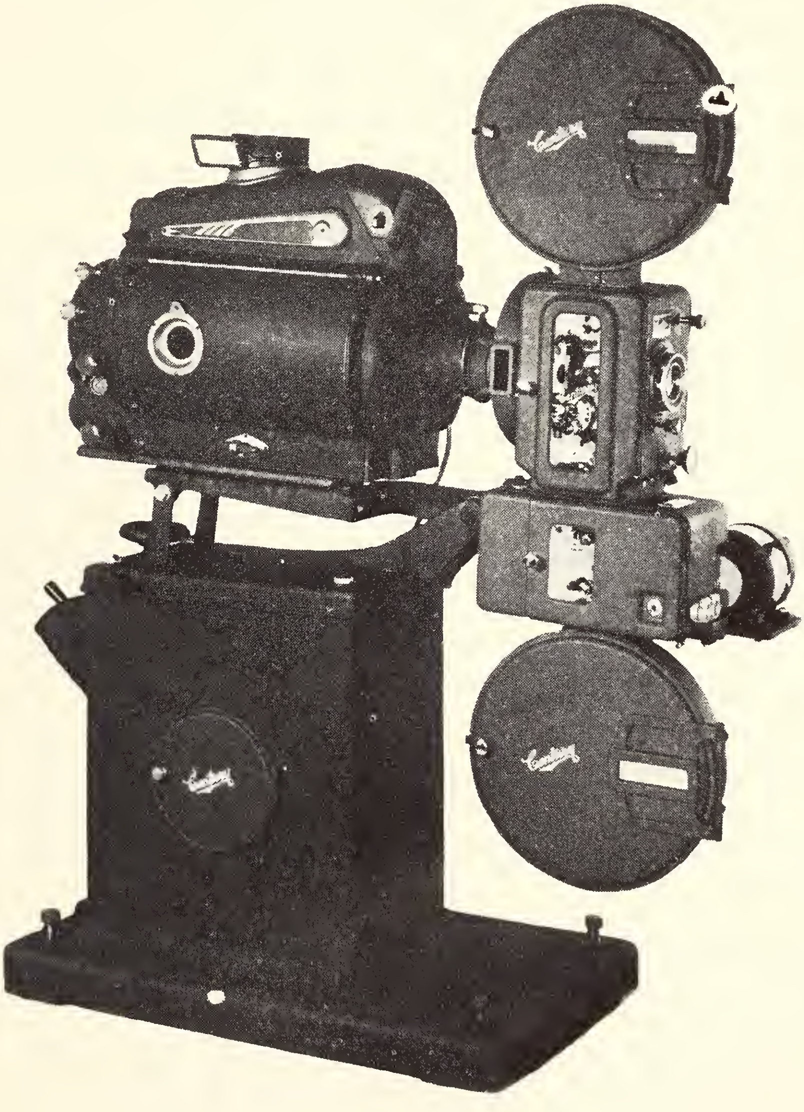


FIGURE 2–25. Above, the 8-mm Bell & Howell Monterey and the 16-mm Filmosound. Opposite, a Century 35-mm projector. Both 8-mm and 16-mm films and projectors have the advantage of being inexpensive and easily carried, while the 35-mm projector, standing as high as a grown man, is costly and is not intended

d. Motion Pictures: The 35-mm film used in cinemas requires special projection machines and trained technicians to operate them. Speakers who use motion pictures as visual aids will probably have more occasion to work with 16-mm films, many of which are available, on a wide variety of subjects, from audio-visual libraries, film-order companies, and various business firms. Such films may be either sound or silent. A sound film, of course, is complete in itself, and really does not require a speaker. As such, it may be a questionable audio-visual aid, unless the speaker is needed to interpret its meaning for the audience in terms of



to be portable. The 35-mm projector and film are unchallenged, however, in terms of effectiveness in large auditoriums. Recently, Cinemascope and other lens developments have increased the breadth of the 35-mm picture. (Courtesy of Bell & Howell Company and Century Projector Company.)

the speech. A newsreel excerpt showing Hitler haranguing a Munich crowd needs the sound for maximum effect, but it also needs the speaker to introduce it and to evaluate it after it has been projected. Silent films may allow the speaker to offer a commentary, following the film. Many of these, however, are already equipped with subtitles or special title panels, which again may render a speaker useless. Or worse, they may contradict what he is saying.

While films provide a wide choice of subjects, complete with movement and attention-getting features, they are more costly than the other visual aids, and they require more care in projection—in most cases, the speaker will need an assistant at the back of the room to do the projecting. They have also a fixed rate of presentation, so the speaker cannot linger over an interesting picture, nor can he return to one which has gone by. They require, again, darkness for effective presentation.

Motion-picture films are most useful in classroom instruction situations. Sound films have actually combined the speaker with the visual aid. Even most silent films are self-explanatory. Therefore, there is usually no need for the speaker. Occasionally, however, speakers will find that a certain clip from a newsreel, a documentary, or a famous screenplay will make exactly the illustration they need for their speech. If the facilities are available, they may be able to use this aid. The audience may be confused, though, by the transition from formal speaking to a few minutes worth of movie and back to formal speaking again. This really breaks the continuity of the speech and the style of presentation too much.

III. Conclusion

A. SUMMARY OF REQUIREMENTS FOR AUDIO-VISUAL AIDS

1. AUDIBILITY OR VISIBILITY: Ensure that the audience can hear or *see* them satisfactorily.

2. ARRESTING QUALITY: Choose only those aids which will gain and keep the audience's attention for you.

3. APPROPRIATENESS: Make them appropriate to the audience, the occasion, the subject, and the speaker.

4. ADAPTABILITY: Be certain that the aid fits your speech. Rehearse with the aid until presentation is smooth.

5. ACCESSIBILITY: Be sure you can get aids when you need them. Keep them in order, but out of sight before and after you use them.

6. AUXILIARY NATURE: Keep the aids in their proper place. Don't let them get the center of attention.

B. NOTE: Mere application of these criteria will not guarantee success. Good taste and imagination, even inspiration, have much to do with aids' achieving the desired result.

SECTION 3 Written and Oral Briefing Techniques

PURPOSE: To discuss fundamentals of written and oral briefing, showing how materials may be most effectively condensed, organized, and presented.

I. Introduction

A. DEFINITION OF BRIEFING: Briefing may be defined as the process of preparing (written briefing) and/or presenting (oral briefing) lengthy or complex bodies of material in the best-organized and most condensed form still favorable to *effective communication* in the shortest time.

Effective communication must be the key in this general definition, for it controls the "how" of the organization and the "how much" of the condensation. The word *brief* implies shortness, and customarily, briefings are sessions in which the speaker or speakers attempt to convey a mass of factual, speculative, or interpretative material in abbreviated form, with no loss of essential meaning or important detail. The time-honored "Treasurer's Report" is often a briefing of this type.

Briefings may be designed to communicate complex material in simplified form. An example of this would be an explanation of a highly complicated engine to a group of men who will be required only to perform basic maintenance on the machine. The organization and the degree of condensation needed for adequate simplification without loss of essentials will be determined partly by the material and partly by the audience for which the briefing is designed. A highly successful briefing on recent developments in nuclear research, made by a physicist for an audience of physicists, might fail miserably in its job of effective communication if it were

presented, unchanged, for a group of high-school girls. On the other hand, a briefing on basic requirements of the modern American kitchen, which was thoroughly satisfactory when the home economics teacher gave it to her class of high-school girls, might be far from effective with the physicists.

Too often, speakers, given the task of briefing material, forget that the main purpose for the briefing is to communicate the material in such a way that time is saved, and possibly understanding increased, for those who listen. It is not enough to get up and recite a concise summary of fifteen reports, even if each word is spoken clearly and distinctly. Audiences may understand the words, but not the meanings of the sentences. Audiences may understand the sentence meanings individually, but not be sufficiently stimulated by the technique of composition and delivery to want to remember the information. In the first case, the preparation may have been above the level of the audience's understanding—the physicist's report given to high-school girls. In the second, the preparation and presentation might have been both boring and irritating to the audience—a home economics lecture given to a group of physicists.

In brief, without effective communication, a briefing will fail of its purpose.

B. DISTINCTION BETWEEN WRITTEN AND ORAL BRIEFING: The term *briefing* came into the popular vocabulary during World War II, when it was used by military men to describe the sessions in which necessary information was digested and communicated to commanders, staffs, and combat units to aid in planning and executing military operations. The public became familiar with briefing by watching scores of motion pictures in which combat aviators received their last-minute instructions in smoky briefing rooms. Indeed, the tense atmosphere of the briefing, a few hours before take-off, became a necessary ingredient of war films, and the movie without such a scene was rare.

Condensed oral reports on plans and operations in military organizations, whether given at company or command level, also came to be known as briefings. Later, the word was borrowed by the business and professional world to indicate analogous informational meetings in their organizations.

The word has another meaning, however. Lawyers for years have referred to their organizational plans in presenting court cases as *briefs*. It is to this usage of the term that briefing owes its other meaning. Popularly, briefing is still thought of as a kind of speech. Actually, briefing

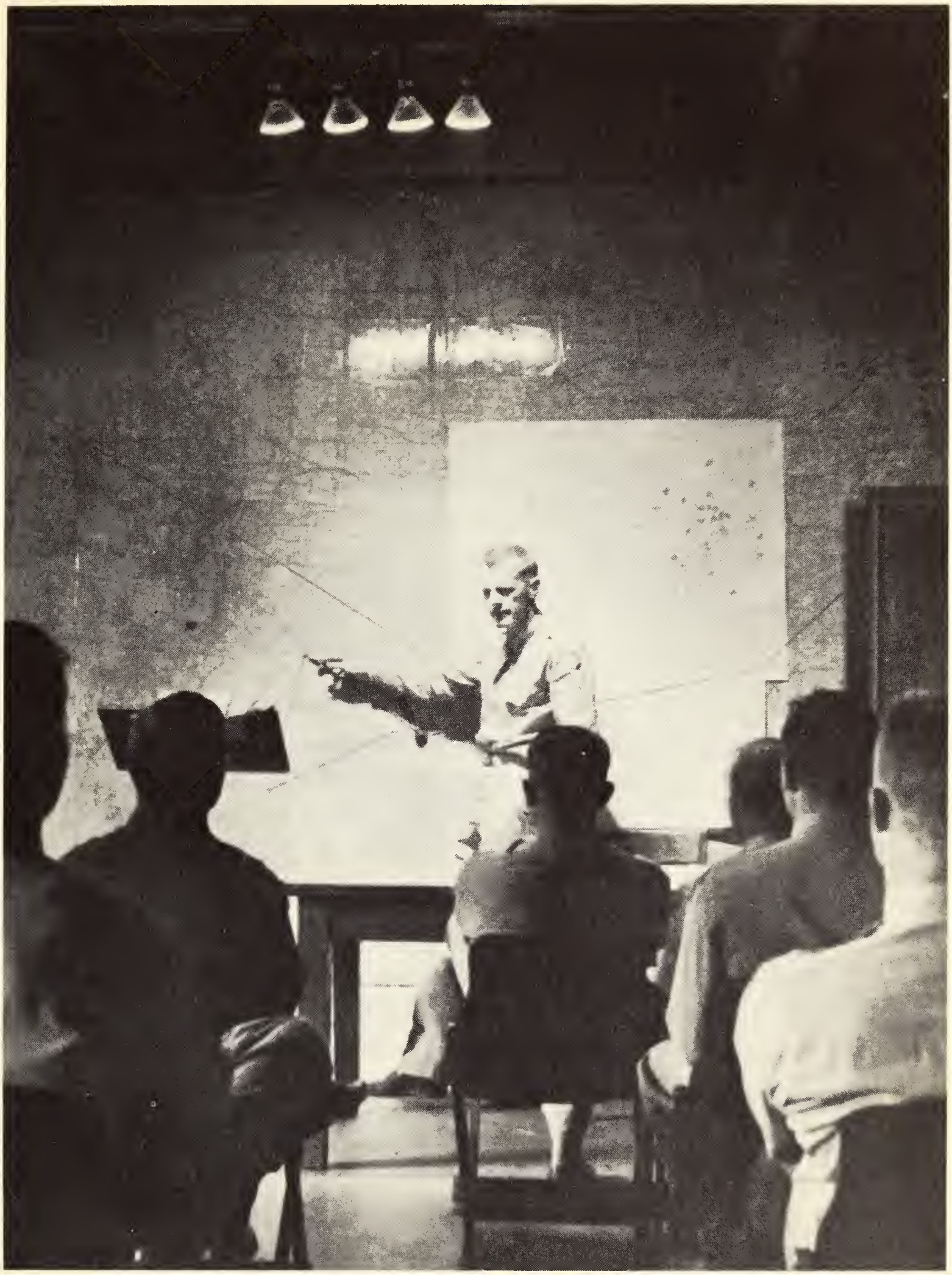


FIGURE 3–1. First Lieutenant Carl E. Waldrop briefs a flying crew on its mission shortly before take-off. Careful preparation enables him to present the maximum amount of information in the shortest possible time, with maximum retention by crew members. Military briefings such as this one have been made famous in combat motion pictures, but there are many other uses for briefing as well. (Official U.S. Air Force photo.)

may be both written and oral. The written briefing, which must always precede the oral briefing, is merely the plan of presentation of the possibly voluminous or complex material for effective communication.

Not all written briefs are eventually delivered orally, however, and thus a problem in organization and condensation has been introduced. What may be effective in a brief meant merely to be read at one's desk will not suffice in a brief intended for a speaking situation. This problem will be considered in the section on written briefs, where the basic issues of selection, compression, and arrangement are discussed. The section on oral briefing, then, will be largely concerned with delivery of the written brief.

II. Discussion

A. WRITTEN BRIEFING: As mentioned above, the purpose of a written brief may be either to give a reading audience condensed, simplified information or to help a speaker prepare for oral briefing. Sometimes, a written brief may serve both purposes.

Perhaps the simplest or commonest form of written brief is a synopsis of previous installments in a magazine serial story. Here, many paragraphs of fiction will have been condensed and simplified into a paragraph which will give the reader all the essentials of what has gone before, without pages of possibly boring details. This is a literary briefing. It is designed to give the reader all the necessary information in the shortest possible time. It is the form upon which an oral briefing is built. Oral briefings usually are the distillations of a variety of written reports, verbal conversations, or eyewitness experiences. Therefore, it is best to begin with one basic unit, the condensation of *one* story, essay, report, or article, later showing how the same procedures can be applied to the briefing of a number of stories, reports, or articles.

1. BRIEFING A SINGLE SOURCE: A briefing of a single source is primarily intended to be read, particularly by a person who lacks the time required to read the original article in its entirety.

   There are a number of tools available for briefing a piece of writing. They all help the briefer summarize the essential meaning, but each one yields slightly different results. Moving from the least degree of condensation to the greatest, the methods are (1) Sentence Summary, (2) Outlining, (3) Précis Writing, and (4) Thesis Sentence Statement. A fifth possible tool, the Critical Analysis, will not be discussed here because it goes beyond simple distillation of meaning, to test the writing for correctness of logic, accuracy of facts, the presence of prejudice, and the coherency of style.

In using any of the four tools, the briefer's task is not to judge the rightness or wrongness of what he is condensing. He is merely trying to reduce the material to its simplest terms for communication to others, who may then judge it for themselves. True, he must evaluate what is more important and what is less important and what should be completely ignored, but such decisions in briefing should be governed by the briefer's obligation to remain true to the author's intent. The briefer should always think of himself as a transmitter, rather than as an evaluator. If he alters the basic meaning of the writing through his condensation, he has failed to brief the writing properly or effectively.

An explanation of the use of the four tools will show why it is so important to keep the transmitting function of the briefer uppermost in the mind.

a. Sentence Summary: The sentence summary is the least compressed form of brief. To make such an abridgment of an article, you should follow four main steps.

(1) Read and reread the article to be condensed. The first reading should give you the general idea of what the author is trying to communicate. The second reading will help you to confirm this impression or, if the details warrant, to change your initial concept of the main idea.

(2) Number each paragraph in the article consecutively, beginning with 1. Write the corresponding numbers on sheets of ruled paper, leaving enough room—perhaps four or five lines—between each number for your work.

(3) Try to reduce each paragraph to *one sentence* which best conveys the main idea of that paragraph. Write the sentence on your ruled paper, after the number which corresponds to the paragraph you are summarizing.

Just as sentences are, in English grammar, said to be "complete thoughts," so paragraphs are units devoted to the examination and exploration of *one complete thought*. When the thought changes, traditionally, a writer begins a new paragraph. Each paragraph, in a well-written piece of prose, then, will have one sentence which tells, in a general way, what the paragraph is going to discuss. This is called the "topic sentence." Unfortunately, finding this sentence and copying it will not suffice for a good summary sentence. You

will have to enlarge upon it to indicate the major qualifications the paragraph has given to the subject announced in that sentence.

Write the summary sentence in your own words, retaining the author's viewpoint and feeling. If the article is written in the first person—"I"—you may either use "I" or "the author" in your condensation. Whichever you choose, don't switch back and forth. It will be confusing to your reader if you do.

(4) When you have finished the individual summaries of sentences, go back and reread the entire summary. Does it reflect the main ideas of the article? Would the original author recognize it as a condensation of his thought? Are transitions from sentence to sentence smoothly made, or are they jerky, or even completely lacking? Is it still too bulky, too wordy, too complex? Work the sentences over until you have a short, streamlined version of the parent article which is faithful, easy to understand, and which has good continuity and contains only the *necessary* words.

It is true that there are ample opportunities for error in writing sentence summaries. That is why it is so important to be certain you have found the *real* topic sentence of each paragraph. Frequently, it will be short and not especially memorable. Beginners are often deceived by this seeming insignificance and, instead, choose a showy sentence, rich in adjectives.

Test your ability by finding the topic sentence in the following extract.

> Every year, thousands of American tourists, rich and poor—but not too poor—tall and short, old and young, come like a flood over the unresisting European hotelkeepers, who are silently counting the expected profits from the "innocents abroad." The big problem for some hotelkeepers is how to arrange the rapid parting of a fool from his money. These men are not dishonest—far from it. They regard the tourist as a challenge. The traveler has money; the hotelkeeper will try to trap him into leaving more of it than the tourist had planned on. One method which is particularly effective is to suggest frequent hot baths. Americans, hot and tired from traveling and schooled in the arts of cleanliness, jump at the offer of a relaxing tub of hot water. Later, they discover that the bath is an extra charge, sometimes as much as the room. Another useful device is the traditional inclusion of service charges in the bill. The American, used to tipping, will pay the service charge all over again as he doles out coins to a huge line-up of hotelworkers waiting to speed him on his way. He can console himself with the thought that it is more blessed to give than to receive.

In the foregoing extract, the first sentence is merely introduction or window-dressing. It is the second sentence which states the topic: "The big problem. . . ."

Having found the topic sentence, the briefer must then study the paragraph to see how the main idea is developed. The author has given two ways in which he says certain hotelkeepers may take advantage of their guests. A good summary sentence, then, should include the topic sentence and the two paths to riches in the hotel business. It should be both brief and clear. A sample summary sentence might be: "Some European hotelkeepers, believing a fool and his money should be soon parted, coax their innocent guests into taking baths, which cost extra, and into tipping the help extra, even though service is already included in the bill."

The attempt in this summary is to preserve the flavor of the original, in which the author is using some good-natured irony. Of course, one could say, "Some sneaky Europeans cheat innocent Americans blind with extra charges for baths and service." This, though both brief and clear, is a gross oversimplification and entirely misrepresents the author's real attitude.

Sentence summaries are usually the most lengthy of the four kinds of brief. They frequently include a statement of the thesis sentence to stress the main idea of the article, just in case it escapes the reader, who may have got lost in so many sentences. Essentially, a sentence summary is meant to be read silently to himself by the person being briefed. It is not very satisfactory as a direct script for an oral briefing, though it may help the briefer to fix the ideas in his mind.

b. Outlining: Less bulky than the sentence summary, the outline has the added advantage of indicating relationships between ideas in the briefed article much more clearly. A sentence summary of a seventy-six paragraph article gives a reader seventy-six sentences to read before he can grasp the main idea as the author has developed it.

Like a skeleton, the outline provides a structural picture of the article, which cuts reading and comprehension time to a minimum. Major divisions stand out most clearly, followed by supporting points in order of subordination. Minor details, relegated to inferior positions, do not, therefore, interfere with rapid reading nor with easy comprehension of the general development of the argument.

Ordinarily, published writing, excepting possibly the aimless work of amateurs or artistic experiments with words, is constructed from

some basic outline. This does not necessarily have to be so complete as a formal speech outline, nor need it even be done on paper. An experienced writer may consciously, or unconsciously, form his outline in his head. Most people who write essays, journalistic work, reports, memorandums, regulations, histories, and similar exacting material need an outline to work from to ensure that their writing will have coherency and plan.

It is the job of the briefer to find that original outline, now buried in the writing. In a well-written selection, such as an essay by Bertrand Russell, the outline will be easy to detect, for not only is the choice of words simple and explicit, but introductory and transitional phrases are employed to reveal rather than conceal the author's meanings and thought relationships. Thus, the task of outlining will be made much easier by such phrases as these: "The subject of this essay will be . . . ," "The first great offense of these men was . . . ," or, "Finally, we must ask ourselves one main question. . . ."

Unfortunately, there are writers, particularly in technical fields, who do not begin with an organizational plan, but simply sit down and begin to write. Often, they will set down the first bit of data or idea that comes to mind. The style may be highly readable, even graceful, but when the briefer attempts to boil down the article to an outline, he finds that *there is no outline*— only a collection of facts or observations listed in no particular order. To use a macabre illustration, it is as if the briefer had stripped the skin, muscles, and fat off the animal and found underneath, not a complete skeleton, but a random assortment of bones. Sometimes, there may not even be enough bones to make an entire skeleton, when the briefer tries to reorganize them into an outline.

Frustrating though such an experience may be, it is still worthwhile, for the process reveals not only the essential given information which must be briefed, but also any significant lacks in information—the shortcomings which may have to be corrected by gathering further data or by drawing the obvious conclusions to thoughts which are incomplete in the text. If the briefer is outlining material for someone else to read, he may want to leave the outline in as fragmentary a form as it emerged from the essay, to give the reader an accurate picture of what the material contained and how it was shaped. If he makes up for the author's deficiencies, however, the outline may be misleading.

Often, the reader of the outline may wish more than glittering frag-

ments. If he does, the briefer should complete the author's unfinished job, indicating what portion of the final outline did not appear in the original article. This correction of deficiencies is particularly necessary if the written outline is to be a preparation for an oral briefing.

Occasionally, the author's outline may be apparent, but actually inadequate or incorrect for presenting his argument or information most effectively. At such times, the briefer may reorganize the material in his outline, but he must be most careful not to distort by changing the context, or the relationships. Some materials may be moved in an essay without harming the essential meaning, but others have only one place in which they will properly reveal the author's meaning.

To lay the skeleton of a piece of writing bare is not always an easy task. Newspaper stories are perhaps the easiest to outline, for they are usually written in "inverted pyramid" style. All the important information, the who, when, what, where, why, and how, are given in the first few paragraphs. Succeeding paragraphs give additional information, enlarging upon the first ones. In a long story, the closing paragraphs may contain items bordering on the trivial or the ridiculous: "The Ambassador was smoking a cigarette as he boarded the plane." The novel structure of the inverted style permits printers to change the length of a news story at will, depending on how much space is available. If an edition is crowded with important stories, the printers will use only the first few paragraphs and scrap the rest, or save them for a later, less crowded edition. In a sense, the newspaper reporter has already briefed his material for the briefer, and the problem of condensation becomes quite simple.

Though different kinds of writing require refinement of special techniques—magazine fiction needs a briefing somewhat different from technical report briefing, for example—there are certain basic steps the briefer can follow in making an outline.

(1) You should read and reread the selection until you have a good general understanding of it.

(2) You should try to summarize the intent of the article in one sentence. What is being described, explained, demonstrated, argued, or recounted? See (d), page 106, on Thesis Sentence Statement.

(3) You should determine the main divisions of the article. Aristotle's dictum that a good tragedy should have a beginning, a middle, and

an end is usually followed in other forms of writing also, for obvious reasons. There are few essays, reports, sermons, or textbooks which do not have an *introduction,* a *body,* or *discussion,* and a *conclusion.* They may be called by different names, and the body, in particular, may be composed of a number of not-too-closely-related divisions, but the structural purpose is generally the same, to lead into the subject, to discuss it, and to summarize the discussion, leaving a vivid impression with the reader.

(4) Study the introduction of the article carefully. You must find the main points which are intended to prepare a reader for the discussion. Among the things usually found in a good introduction are these: (a) statement of purpose of the article, (b) definition of terms, (c) limitations of the discussion, (d) importance of the subject to the reader, (e) plan of the discussion, (f) author's qualifications to write the article, and (g) background, or history necessary to place the subject in proper perspective for the reader.

Some of these elements *must* be present in every piece of good writing. Others are optional, their use depending upon the thoroughness of the writer or the purpose of the article. In outlining the introduction, these main elements should be listed in order, as they occur in the text, with A., B., and C., as designations. Subordinate material used to develop the principal headings is structured in descending order of importance.

I. Introduction
  A. (Statement of subject)
  B. (Definitions)
    1. (First word)
      a. (Webster usage)
      b. (Thorndyke usage)
        (1) (Formal)
        (2) (Popular)
    2. (Second word)
      a. (Webster usage)
  C. (Author's qualifications)
    1. (School)
    2. (Travel)
    3. (Work)

Essentials can be seen immediately and without undue difficulty in such an outline. Interesting, but minor, details can be rapidly

passed over, if time is short. Each subordinate point *must* support the next higher point above it. If it does not do so, it is either improperly subordinated or is misplaced in the organizational plan. Sometimes, study will reveal that a subordinate point is really more important than the point under which it has been placed. If so, corrections are mandatory. Examination may also reveal that a subordinate point is actually of little or no value in supporting the next higher point. If this is the case, it should either be left out or placed where it will give support.

This entire text has been constructed on a simple, but inclusive outline. The outline designations have been preserved both to aid the reader in locating specific sections of the discussion and to give a concrete example of writing which can be easily briefed because it is built on well-defined foundations. The skeleton of this text should be readily apparent to even the casual reader. In a formal outline each successively subordinate value is indicated by progressive indention to the right. Some compromise with this indention has been effected in this printed book in order to minimize the waste of space that would be required by complete outline indention. But the outline scheme itself remains unimpaired, and the relative values of headings remain entirely clear. Standard outline indention, without compromise, may be seen in the examples of formal outlining given on pages 100 and 112–113. To gain practice in outlining and to master the material in the book, reducing the text to outline form again is recommended.

Briefers should always be careful to use only one sentence per point in the outline. Two sentences are two ideas. They require a point apiece. The sentences must be complete. Sentences should be ended with periods. Some may say that the completely formal outline employs no verbs but is made up entirely of nouns and phrases. For briefing purposes, however, each point in the outline may well be presented as a single sentence. Much vagueness or ambiguity may be thereby avoided. Single words or sentence fragments may carry worlds of meaning for the briefer, but they may easily mislead the reader. The word *dog,* appearing under a humane society writer's qualifications, might mean (1) He likes dogs. (2) He has a dog. (3) He knows a lot about dogs. (4) He always wanted a dog, but his mother wouldn't let him have one. (5) He thinks dogs don't make good pets. (6) He hates dogs.

In making a brief, then, be brief, but be explicit. Don't force future readers of the brief to resort to mind reading. If you have been careful, you will have a concise, communicative outline, uncomplicated by illustrations, anecdotes, quotations, or useless rhetorical flourishes.

(5) Though the next step, outlining the body of the discussion, is the most difficult, the previous steps have already done part of the work. You know what the subject is—statement of purpose. You know what stand the author is taking—thesis sentence. You know how the terms will be used—definitions. You usually know what the plan of the discussion will be.

If you do not know what the plan of discussion is, you must discover it before you go any further, for it is the basic scheme of the development of the body. Without it, you cannot begin to outline. With it, you need only locate the particular main points which belong to the plan. Subordination, as in the introduction, will be done with the system of Roman numerals, Arabic numerals, and upper- and lower-case Latin letters.

Most articles you may encounter will have been constructed on one of the following plans, or combinations and variations thereof.

(a) Chronological, or Time, Plan: This is the traditional method of the storyteller or narrator. Significant events are arranged as they happen in time sequence. Arrangement may be from past to present, present to future, or even in reverse order.

(b) Structure-Function Plan: Here, the writer studies a mechanism or organism, showing how each detail of design fulfills some special requirement. This plan of study may be applied with equal success to the analyses of steam engines or of governments.

(c) Inductive, or Enumerative, Plan: In using the inductive method of reasoning, a writer uses a large number of specific instances to arrive at a generalized rule. In writing, he may state the rule first and then attempt to prove it with his evidence, or he may pile example on example, leading up to a seemingly inescapable conclusion—or generalization.

(d) Deductive Plan: A generally accepted proposition is stated. Then the writer makes the attempt to prove that what is true of the generality is also true of a specific case. In order to prove this,

he must demonstrate that the specific case is a member of the general class about which the proposition has been made:

All men are mortal.
Socrates is a man.
Therefore, Socrates is a mortal.

(e) Cause-and-Effect Plan: This may be either inductive or deductive. If one shows that every time one touches a hot stove he is burned, after forty burnings it may be assumed that there is a relation. Hot stove is the cause of the effect, burnt hand. Most people would not require this much inductive proof. Deductively, the argument may be organized this way:

People who touch hot stoves get burned.
Jack has touched a hot stove.
Therefore, Jack has been burned.

It is true that a great many errors are made in using this kind of discussion plan. Some are innocent; some, deliberate. Most common is *post hoc, ergo propter hoc*—"after that, therefore because of that." Merely because one event follows another in time does not mean there is any necessary causal connection. The briefer's task is not to correct errors in reasoning, but to reveal them by skillful outlining. When the argument has been stripped of its rhetorical façade, the soundness or shakiness of it will be much more apparent. This is one major advantage of briefing written material.

(f) Process Plan: This is a specialized version of the chronological plan. The steps in an operation or a procedure are described in a logical sequence, as in the process of assembling or disassembling a machine.

(g) Comparison-and-Contrast Plan: Two or more mechanisms, plans, or organisms are compared for likenesses and contrasted for differences.

(h) Elimination Plan: A number of solutions to a problem are presented. The writer attempts to show that all, save one, are unacceptable.

(i) Unsatisfactory Alternative Plan: Similar to the elimination plan, this offers only two solutions, one of which is completely unsatisfactory. The assumption is that the remaining solution must be accepted. Briefers must beware. The author may not have considered *all* the possible solutions, and he may not have considered the *best* solutions. The briefer is not supposed to correct the accidental or intentional mistakes in the reasoning. He is merely supposed to expose them so they can be clearly seen by those who read or hear the outlined brief.

(j) Problem-solving Plan: Following the steps used in scientific method, and adapted for conferences in Section 4, this plan is frequently selected as the best for technical research writing, military staff reports, and studies in business, industry, and the professions.

Steps to look for are[1] (1) locating and defining problem, (2) examining problem, (3) setting up criteria for a solution, (4) suggesting solutions, (5) choosing the best solution, and (6) making recommendations for putting the solution to work.

(k) Geographical, or Location, Plan: The writer treats countries, areas, objects, or even people as they exist in relation to one another in space.

(6) Finally, you must outline the conclusion. Look for such things as (a) a summary of the main points made in the discussion; (b) recommendations for change of belief, policy, or action on the basis of the discussion, and (c) suggestions to stimulate further thinking and action on the subject discussed.

c. Précis Writing: A précis is usually a one-paragraph summary of the content of an article. The "Synopsis of Preceding Installments" found in many magazines is a good example of précis writing.

There are three ways to make a good précis. First, if the briefer has already made a sentence summary, he can easily combine and condense his sentences even more to make a one-paragraph summary. Second, if he has made a good outline, he can simply select the main points, which stand out clearly, and organize a good synopsis from them.

[1] See H. L. Eubank and J. J. Auer, *Discussion and Debate,* Appleton-Century-Crofts, Inc., New York, 1946, pp. 83–84.

The third method is actually easier than the first two, for it does not require all the initial work of summarizing sentences or stripping the skeleton of an article bare. Instead, the briefer makes his summary paragraph directly from the article, with no intermediate form of brief. The steps to be followed are these.

(1) Read and reread the report or article to fix the main ideas clearly in mind.

(2) Underline important sentences and phrases in each paragraph. This gives more latitude than a sentence summary, for some paragraphs admittedly have a wealth of information, while others have little or nothing to say. In using this system, the briefer may pass over a transitional paragraph entirely and retain, instead, several sentences from a significant paragraph.

(3) Write down the underlined material in order, as it occurs in the article.

(4) Condense these sentences and phrases by—

(a) Removing useless words and phrases.

(b) Rewriting to make one sentence do the work of two or three.

(c) Eliminating illustrations, anecdotes, and quotations.

(d) Making simple generalizations to cover sets of data, statistics.

(e) Putting the remaining sentences in your own words, being sure to provide transitions from sentence to sentence which will show correct relationships between ideas.

(f) Writing the final summary to the length required by the complexity of the material and the needs of the potential audience. Highly technical writing in the field of electrical engineering, for example, cannot be satisfactorily briefed in three sentences, but, if the intended audience is made up of experts, it need not be so long as it would have to be for novices.

What to include and what to omit, without destroying the author's intent, is one of the biggest worries in briefing. Practice and common sense will help a briefer develop his ability to evaluate material accurately.

In preparing this précis, the briefer should avoid making hasty con-

clusions about the meaning of a sentence. Also, he must avoid mental shortcuts, if he wishes to be sure that he does not overlook important ideas buried in the text. During the actual writing of the précis, he should first remove excess words, remove repetitious phrases, and tighten his writing so that only the most essential words remain. "Of course," "On the other hand," "Undoubtedly," may all give needed transition and even flavor to an article, but they take up valuable space in the précis without paying their passage.

d. Thesis Sentence Statement: The fourth method of briefing is the ultimate in condensation. Here is the author's entire article in a nutshell. One sentence reveals the subject matter and what the author intends to demonstrate about it. Thesis sentences should not be confused with purpose or subject sentences, which merely introduce a topic for consideration, without indicating what the conclusions will be. The thesis sentence, to be effective, must be the introduction, discussion, and conclusions, all rolled into one.

After you have made a sentence summary, an outline, or a précis, you will either already have a thesis sentence included in the brief, or you will be just one step removed from it. If you wish to boil any of the three forms of brief down into a concise, accurate thesis sentence, be very careful not to interpret the meaning and intent incorrectly. Don't try to make the thesis sentence say everything, either.

Many well-written articles and reports contain at least two statements of a thesis sentence. The first one may be found in the introduction, often just preceding the discussion. This sentence is designed to supplement the general announcement of topic in the subject, or purpose sentence, by indicating how the discussion will develop or what the author intends to demonstrate. If a subject sentence is "This article will discuss accident prevention," the thesis sentence might be "The auto accident rate can be lowered with careful driving, better roads, and more frequent mechanical check-ups for vehicles." This second sentence, or one similar to it, should also appear in the conclusion of the article, to sum up the discussion and leave a strong impression with the reader.

Occasionally, to build suspense or interest, the writer will save his thesis sentence for the conclusion. The subject sentence will tell the readers what is to be discussed, but it will not reveal how the topic will be developed or what the writer's attitude is toward it. Step by step, the argument is unfolded. Only in the conclusion does the au-

thor summarize the steps in his discussion in one sentence which crystallizes the meaning of the piece.

If, after diligent search, you cannot find even the vestige of a thesis statement in the text, you must build your own. To shape a good sentence, the following questions may be asked.

(1) What is the subject?
(2) What is the author's attitude toward it?
(3) What stand does the author take?
(4) What method of discussion is used?
(5) What, if anything, does the author advocate?

Discovery of these five elements should help you gather the information you need for a good thesis sentence.

2. BRIEFING TOOLS IN ACTION: The four briefing aids will be applied to the essay which follows, to show how they may be used in practice. The piece to be briefed is neither lengthy nor complex, but it can suggest how the tools would be used on longer or more difficult articles.

HOW TO FAIL AS A SPEAKER

(1) Have you visited your bookstore lately? If you have, you must have noticed the crowds of people pushing and shoving, all trying to get a copy of *The Power of Positive Thinking, Peace of Mind, You Are What You Eat,* or *How to Succeed in Selling.*

(2) Looked at TV this week? What did you see? That's right! "Dainty underarms will get you that raise!" "Successful men smoke El Choko cigars!" "She'll love you more with a toothpaste smile!"

(3) Today's man is constantly surrounded by books, courses, ads, and gimmicks, all designed to help him reach the pinnacle of success. The market is becoming glutted. This essay will meet the heartfelt need of those men who want to fail, but have not been able to find out how to do it. You who dare to be different, search no more; here are the answers.

(4) There are myriad ways in which a man can fail. This discussion will be limited to the problem of how to fail as a speaker. Because most of the things men do during their lives, whether for business or pleasure, require communication, the man who knows how to fail as a speaker is well on the road to complete failure in other fields as well. If he applies himself conscientiously, he may even be able to lose his job, break up his marriage, alienate his children, and get more than his share of traffic tickets. There are enough types of speakers to fill a book on the subject, but this essay will use the word in the sense of public platform speaker.

(5) Success as a speaker is achieved when the audience listens with interest and

friendliness, understanding what it hears, possibly even accepting what it hears. Failure, then, is the opposite. Failure is complete audience rejection. The failing speaker is able to antagonize, bore, confuse, mislead, and disillusion his audience.

(6) Lest readers mutter to themselves, "He doesn't know what he's talking about," the writer must emphatically state that he has been a failure as a speaker both on and off the platform for over twenty years. From this rich harvest of experience, he has selected some outstanding aids to failure.

(7) Ordinarily, man thinks before he speaks, so the ways in which faulty preparation will help a speaker to fail will be discussed first. They will be followed by novel and interesting ways of ruining a speech during delivery. Combining the scientific methods of bad planning with the artistic skills of bad delivery, even a novice can be guaranteed of failure the first time out.

(8) As a speech writer, you have two main goals to reach: You must antagonize and bore your audience at the same time. This is not easy, for the first stirs up the emotions, while the second lulls them to sleep.

(9) First, consider antagonism. Your choice of subject will be most helpful. If you are planning to speak to the County Ministerial Association, you could advocate burning all the churches. This will antagonize your audience beyond your wildest dreams of success. On a lesser scale, suppose you are going to address the PTA on the role of the American mother in child raising. This will probably not irritate them at all, so you should open your talk with a reading from *Generation of Vipers* and denounce the entire group as selfish, shallow-minded cannibals, devouring their own young. If you can bring this off well, you may be hanged in the nearest public square before you are able to finish. That's a real tribute to failure.

(10) Discussing your subject as if you're addressing a group of low-grade morons is sure to have an immediate effect on your audience. They will remember you for a long time, especially the way you looked with that squashed tomato on your suit.

(11) Another irritant that's always worth a try is telling all the off-color jokes you know to a Sunday-school class or reciting ribald limericks at the funeral of the town's most respected citizen. Once you have mastered the foregoing principles, your own ingenuity will provide you with a constant stream of ideas.

(12) Now that you know how to stir the audience up, you have to be able to put them back to sleep—and fast! In the preparation of your talk, you will find that long passages of material quoted—or stolen—from obscure nineteenth-century authors, such as Orestes Brownson, are excellent for inducing a deep and restful sleep in even the most alert audience. Remember, if you would fail as a speaker, you must kill that alertness. It is your enemy. Don't tolerate even a glimmer of interest.

(13) If the audience seems cheerful, tell them interminable, sad stories about the death of your pet cobra, or describe how a tarantula eats its victims. If they seem intent and serious, reel off all the variations of "Who was that lady I saw you with last night?" It's always good policy to begin a speech with any of the following attention-killers: "Unaccustomed as I am to public speaking . . .," "It's a pleasure to

see so many shining faces here tonight . . . ," "That reminds me of a funny story. . . ."—Be sure the story is not funny and that it has not even the remotest connection with your speech. "The funniest thing happened to me on the way over here tonight . . ."—again, make certain that the story is not funny and that it could never have happened to you. Give an audience something they can really laugh at, and you have spoiled them.

(14) If you fail to lose the audience's attention by reading all the anecdotes out of last month's *Reader's Digest,* you might well rearrange the material of your speech, if you have any content to it, in such a way that even the most astute listener will not be able to discover a logical pattern. This way, you will be able to conceal the subject, your analysis of the problem, and your solutions, to say nothing of your evidence. If you can perfect the ability to disorganize a simple subject, you may also aid in the overcrowding of mental homes by driving your audiences to take refuge in them. Usually, the audience will stop trying to follow you after three sentences. When they have gone to sleep, you have the room all to yourself. What a feeling of power this gives you!

(15) The foregoing methods of boring an audience are mere child's play. The acid test is to take a good subject, with logical organization and sound illustrations, and make a glorious failure of it. The novice will ask, "But how can I ever be that good?" The procedure is simple, but the necessary tools take a while to acquire. You must comb the dictionary and the encyclopedia and all the technical publications you can find for cumbersome, confusing words, and phrases which your audience is sure not to understand. Generous readings in the philosophers, particularly Kant and Kierkegaard, will help you to perfect your style. Cull official documents from Washington; they are treasure-troves of vague, pretentious phrases. When you have your tools in readiness, you can make the simplest subject supremely boring and incomprehensible to even the most intelligent audience. Work on this!

(16) Now you have mastered the skills of preparing a failing speech, you must acquire the arts of delivering a failing speech. Your goals, fortunately, are essentially the same as they were during composition of the talk; you must irritate, bore, and confuse.

(17) As you must have guessed, the big secret of failure is deliberately to avoid communicating anything to the audience—except your contempt and hostility. Your body can do a lot to aid you in these tasks. Begin with the eyes. Try staring at the ceiling, studying the floor, or looking out of the window to see if it will snow. If you rivet your gaze on the back wall, just above the heads of the audience, you will find they will develop an irresistible compulsion to turn around and see if a colony of bats is roosting there. This is good. Once they have turned around, leave them that way. If you are naturally shy, it will make you feel more secure. Whatever you do, don't look your audience in the eye.

(18) "Effective action is total bodily action," or so the books say. This can hold true for you, too. Use your whole body to show your audience that you are afraid

of them and that you are completely unprepared. This will leave a more lasting impression.

(19) You can also guarantee unsatisfactory communication by wise use of gesture. If you are telling the story of a happy event, look glum. If you are describing a recent serious accident which happened to your wife or best friend, laugh like an idiot. You know the saying, "Laugh, and the world laughs with you." Be sure your face expresses exactly the opposite of what you are saying. If you can't carry this off, stay deadpan.

(20) Give your hands a chance to help you with the gesture problem. If the audience still seems to have some life left in it, crush this immediately by ramming your hands deep in your pockets, or hiding them behind you, clenched in a vise-like grip. If the audience seems to be getting complacent, shake them up a bit by waving your arms wildly about, playing with your coat buttons, coins, key chains, hair, and anything that's not nailed down. Remember, the speaker who really wants to fail will always edify the audience by scratching himself periodically in hard-to-reach places, or by tugging at his ear lobe.

(21) The speaker's most important weapon for use against an audience which is still trying to be interested, friendly, understanding, and courteous is his voice. All other devices of interfering with communication pale into insignificance when voice is considered. All the speaker has to do is prevent the audience from hearing what he is saying, if anything. By mumbling or garbling his words, the speaker can render even the multiplication tables incomprehensible. Mispronunciation also can be fun. Imitating a Southern drawl, if you are from New England, is always good for a laugh and will make the folks down in Atlanta shower you with lots of that old Southern hospitality, for sure.

(22) If the speaker notices that a few people in the front row are still able to hear him because they are half-crouched in the aisle, straining for his voice, he will do well to lower his tone to a gentle whisper. No sense in overworking those delicate vocal folds for anything as trivial as an audience. Of course, variety is still the spice of life, so, delivering half the speech with a force that rattles the windows and makes the audience dive for cover will be a pleasant change and prevent communication at the same time.

(23) If the audience has been too forcibly aroused by the blast of oratory, it might be a good idea to finish in a monotone. Pitch variations are not apt to help ruin a speech, unless they are sudden and startling leaps from bullfrog bass to C above High C. Be your own Yma Sumac.

(24) Speaking with exaggerated slowness and lack of pauses will be a positive advantage in the struggle toward boredom. Some dishonest listeners will still try to understand what is being said, however, so the speaker must speed up his tempo sufficiently from time to time so that even Walter Winchell would not be able to follow him.

(25) To make your speech a wretched experience that the audience will never forget, work hard to make your voice thin and reedy, hoarse or harsh, breathy or

nasal. Get a good head cold. Lead the football cheering section during a snowstorm. Smoke five packs of cigarettes a day. Your voice will be a thing of rare beauty!

(26) If you are able to master the techniques, both in preparation and presentation, of antagonizing, boring, confusing, misleading, and disillusioning an audience, you can be confidently assured of failure as a speaker.

(27) Remember, practice is the touchstone. If at first you don't fail, try, try again. Things really worth having in life don't come easily.

Now that you have read the essay, you are aware that the author is joking. He says he will show you how to be a failure as a speaker, but throughout the article, you can see that he is exaggerating all the faults of bad speakers to emphasize how serious these faults can be. He really intends that you will avoid these errors and, instead, practice their opposites, which will help you to be a successful speaker. How, then, does the briefer retain the flavor of the original essay and convey the idea that the author hopes the readers will practice good speech habits? The briefer will simply condense the article as it stands, trying to preserve the outrageous exaggeration, so that the ironic tone of the satire will emerge, even in a précis. He does not begin by saying, "This is a satire." He trusts that his brief and the intelligence of his readers will make that fact obvious.

When briefing, remember that all things are not what they seem on the surface. The author of the above satire, while joking, is actually making a plea for the use of good speech habits. And an essay which appears to be direct, matter-of-fact, and even dull reading, may actually be an exceedingly clever plea for some special action or belief. By treating a controversial subject in a "low key" or matter-of-fact way, the author makes the unwary reader assume that there is no real controversy at all. Careful briefers must learn to read between the lines.

a. Sentence Summary of Essay

HOW TO FAIL AS A SPEAKER

(1) People are eager to buy books showing them how to be successful.
(2) TV ads urge better personal appearance as a key to success.
(3) To offset all the agencies teaching success, this essay will show you how to fail.
(4) The essay will discuss techniques in failing as a platform speaker, because poor speakers will fail in most other things, too.
(5) Failure is complete audience rejection, achieved by boring, confusing, and misleading.
(6) The writer is an authority, having been a failure as a speaker for over twenty years.

(7) The essay will discuss faulty preparation, followed by faulty delivery, as main aids to failure.
(8) Speech writers must antagonize and bore at the same time.
(9) Choice of an irritating or unsuitable subject will help antagonize the audience.
(10) Treating audiences like low-grade morons will irritate them.
(11) Telling improper jokes at proper occasions will annoy them.
(12) To put your audiences back to sleep, you must kill their interest, preferably with long, dull passages from nineteenth-century literature.
(13) Bore your audience with all the old speech clichés you can find.
(14) Bore the audience by disorganizing your speech so they can't follow your line of reasoning, if any.
(15) Fill your speech with all the long words, empty phrases, and confusing references you can find, in order to bore the audience.
(16) In delivering a failing speech, you must try to irritate, bore, and confuse, just as you do when writing the speech.
(17) Using the body to achieve speech failure, try every device to avoid looking the audience in the eye.
(18) Let your body show that you are unprepared and afraid of your audience.
(19) Make sure your face expresses exactly the opposite of what you are saying, or else stay deadpan.
(20) Speech failure is aided by refusing to gesture or by using the hands for wild, distracting motions.
(21) Most important is the speaker's voice, which can be garbled so no one can understand what he is saying.
(22) Muffling the voice or bellowing will prevent even an eager audience from hearing.
(23) Use either a monotone or extreme changes in pitch for a shattering effect on the audience.
(24) Speak either too slow or too fast to bore and confuse your audience.
(25) Try to ruin your voice so that the audience will really remember you.
(26) If you master antagonism, boredom, and confusion, you will be able to fail as a speaker.
(27) You must practice to achieve successful failure.

b. <u>Outline of Essay</u>

HOW TO FAIL AS A SPEAKER

I. Introduction
  A. People are being urged to succeed.
  B. This essay will show how to fail.
    1. It will offset success material.
    2. There is a need for it.
  C. Only failure as a platform speaker will be discussed, for it leads to other failures.

D. Failure is understood to be complete audience rejection.
E. The writer has been a failure for twenty years.
F. Faulty preparation, followed by faulty delivery techniques, will be the order of the discussion.

II. Discussion
A. Speech writers must simultaneously antagonize and bore.
1. A number of devices will antagonize.
a. Choose an irritating or unsuitable subject.
b. Treat audiences like low-grade morons.
c. Improper jokes will help.
2. A variety of ways to bore people exists.
a. Kill interest with long, dull quotes.
b. Use many speech clichés.
c. Purposely disorganize the speech so the audience can't follow it.
d. Fill speech with long words, empty phrases, and confusing references.
B. In delivery, the goals are the same as in composition, so your major effort should be to achieve noncommunication.
1. Your body will be a big help.
a. Don't look at the audience.
b. Let your body show you are afraid and unprepared.
c. Use inappropriate facial gestures, or none at all.
d. Either wild hand gestures, or none at all will be good.
2. Your voice, which can be garbled, is most important in preventing communication.
a. Alternately mumbling and bellowing is good.
b. Either a monotone or extreme pitch variations will be effective.
c. Confuse the audience by talking too fast or too slowly.
d. Ruin your voice so audiences will remember you.

III. Conclusion
A. Mastering antagonism, boredom, and noncommunication in composition and delivery will help you to fail as a speaker.
B. Remember, "Practice makes perfect."

c. Précis of Essay: Following the method laid down in the text, it will be necessary to demonstrate three of the steps here.

(1) Underline important words and phrases in each paragraph. This has already been done. Refer to the essay for underlining.

(2) Write down the underlined material in order, as it occurs in the essay.

Today's man is . . . surrounded by books, courses, ads . . . designed to help him reach . . . success. . . . This essay will meet the need of those men who want to

fail. . . . Discussion . . . limited to . . . how to fail as a speaker . . . in the sense of public platform speaker. . . . Failure is complete audience rejection. . . . Writer . . . has been a failure as a speaker . . . for over twenty years. . . . Man thinks before he speaks, so . . . faulty preparation . . . will be discussed first . . . followed by . . . ways of ruining a speech during delivery. . . . Speech writer . . . must antagonize and bore . . . audience. . . . Not easy, for the first stirs up emotions, while the second lulls them. . . . Your choice of subject will . . . antagonize your audience. . . . Discussing . . . as if . . . addressing . . . low-grade morons . . . immediate effect on your audience. . . . Another irritant . . . is telling . . . off-color jokes . . . to a Sunday school. . . . Long passages . . . quoted . . . from obscure . . . authors . . . inducing . . . sleep in . . . audience . . . You must kill . . . alertness. . . . If the audience seems cheerful, tell . . . sad stories. . . . If they seem intent and serious, reel off . . . attention-killers. . . . Rearrange the material . . . to conceal the subject, your analysis of the problem, and your solutions . . . your evidence. . . . Audience will stop trying to follow you . . . you have the room all to yourself. . . . Comb the dictionary and the encyclopedia . . . technical publications . . . for cumbersome, confusing words and phrases which your audience is sure not to understand. . . . You can make the simplest subject supremely boring and incomprehensible. . . . Delivering a failing speech . . . goals . . . same as they were in composition . . . the big secret of failure is deliberately to avoid communicating anything . . . . Body can do a lot to aid you . . . don't look your audience in the eye. . . . Use your whole body to show . . . you are afraid . . . unprepared . . . wise use of gesture . . . be sure your face expresses . . . opposite. . . . If you can't . . . stay deadpan. . . . Give your hands a chance to help . . . deep in your pockets or hiding them behind you. . . . Waving your arms wildly about, playing with . . . anything not nailed down . . . . most important weapon . . . against an audience . . . is his voice. . . . Prevent audience from hearing what he is saying, if anything . . . mumbling or garbling . . . mispronunciation . . . imitating . . . people . . . straining for his voice, he will lower his tone to a gentle whisper. . . . Delivering . . . with a force that rattles the windows . . . will . . . prevent communication. . . . [calm audience by speaking] in a monotone . . . pitch variations . . . to help ruin a speech . . . are sudden and startling. . . . Exaggerated slowness . . . lack of pauses will be . . . advantage . . . toward boredom. . . . Speed up his tempo . . . Winchell would not be able to follow him. . . . Make your speech a wretched experience . . . voice thin and reedy, hoarse or harsh, breathy or nasal. . . . Master the techniques . . . of antagonizing, boring, confusing, misleading, and disillusioning an audience . . . be . . . assured of failure as a speaker. . . . Practice is the touchstone.

(3) Combine the steps of condensing the fragments, putting the material into the briefer's own words, and making final adjustments for simplicity and brevity. The result will appear somewhat as follows:

HOW TO FAIL AS A SPEAKER

Today's man is surrounded by many things designed to help him reach success. This essay is for men who want to fail, instead. Failure will be discussed only in reference to public speaking, where it can be defined as complete audience rejection. The author has firsthand knowledge from twenty years failure as a speaker. Because man thinks before he speaks, failure in preparation comes first. The speech writer must antagonize and bore his audience through offensive subjects, phrasing fit for morons, off-color jokes, dull quotations, attention-killers, speech disorganization, incomprehensible words and ideas. Having the same goals, failure in delivery is achieved by refusing to communicate with the audience. The body aids this in several ways: refuse to look audience in the eye; show you are afraid or unprepared; use incorrect facial expressions or stay deadpan; either don't use the hands or wave them around fantastically. Voice helps ruin delivery, too. Mumbling, garbling, mispronunciation, imitating, are all useful. Speaking too softly or loudly, too slowly or rapidly, speaking in a monotone or with erratic variations in pitch will also lead to failure. Unpleasant voice quality, added to the others, will help the speaker to antagonize, bore, confuse, mislead, and disillusion an audience. Success in speech failure, however, is only achieved through practice.

d. Thesis Sentence of Essay:

For those men who don't want to be successful, mastery of the rules of unsatisfactory speech preparation and presentation will guarantee bored, antagonized, confused audiences, and resultant resounding failure as a public speaker.

3. BRIEFING A NUMBER OF SOURCES: So far, attention has been focused on the principles and practice of condensing one piece of writing only. The basic use of such briefs is to enable another person to save time and confusion by reading a careful synopsis of original material. There are frequent occasions, however, when it may be necessary, particularly in preparation for an oral briefing, to condense not one but several articles, reports, or essays. At such times, it is usually advisable to integrate the various materials into one brief, synopsis, or condensation.

In making a report on the progress of slum clearance in Chicago, for example, you might find that among your materials were magazine articles, personal interviews, transcribed telephone conversations, clips from the newspapers, sociological treatises, old books—*If Christ Came to Chicago*—, clips from the newspapers, collections of data, and possibly sections of the housing code. You *could* simply brief each item, give it a chapter number, and then bind them all together in one large

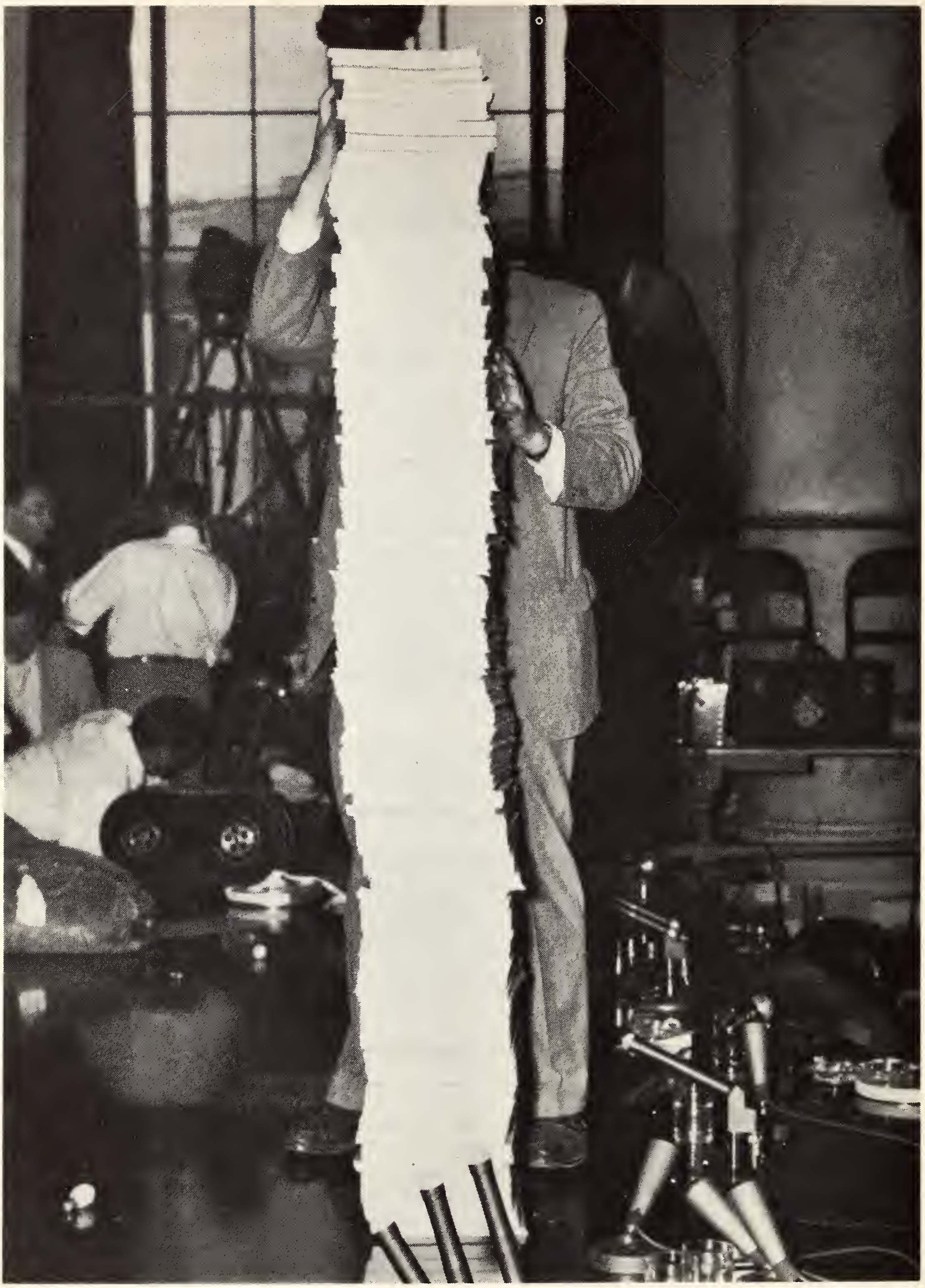


FIGURE 3–2. Government bureaus, corporations, small businesses, and research agencies provide an ever-increasing stream of reports. Pictured above are the findings of a Senate committee hearing. Executives, military leaders, scientists, and professional men often need to have the vital portions of such reports briefed for them because they do not have the time to read volumes of statistics. (Wide World Photos.)

volume. This will force the readers to read every line to get the value from the report. Repetition of information is unavoidable.

To be effective, the report should be both *integrated* and *concentrated.* The people for whom you are making the report on slum clearance don't want to have to duplicate all your work of reading through the many sources or of wading through long stretches of unrewarding text before finding something of value. Your job is not only to save them time, but to clarify complex materials and impose order on disorganized bodies of fact and opinion. Your job is to hunt down the materials, to condense them so that they are short but meaningful, and by your scheme or organization in the brief, to indicate the relationships between and the importance of each of the selected materials. If you have done these things carefully, you will be able to turn out a report that will not only be short, but also very much to the point.

This briefing process is essentially what the research writer does, but it is also what any conscientious public speaker must do. In order to speak with authority, the speaker must have evidence to back up his assertions. To give a good informational or persuasive speech on slum clearance, the speaker must have adequate statistics, quotations, official statements, reports, and interviews.

Both the research writer and the speaker have similar problems to consider in condensation and organization. The main difference is that the researcher's brief is meant to be read and the speaker's brief is meant to be heard. A reading audience will be able to understand and retain more complex and more lengthy material than will a listening audience. Readers can study and restudy the text of a written multiple brief or report, if they are puzzled about meanings or think they have overlooked something. Listeners cannot usually call back even one phrase of an oral brief, once it has been spoken.

There are five main steps in preparing the brief of multiple sources, whether the brief be intended for a reading audience or a listening audience.

a. Gathering Material: Most researchers and speakers do not have their materials immediately at hand. They must, having once chosen or having been given a problem to study, search for the data, events, reports, interviews, and articles which will help them to give a good presentation and exploration to the subject. To the scientist, this may

mean long hours of work in the laboratory, often involving a corps of investigators. To a military man, it may mean requesting individual reports from each section under his command, so that he can compose a general report of the work of his group. For a professor, it may be instead years of research, studying documents, editing play texts, and even opening graves, trying to find the literary clues which will prove finally that Shakespeare really wrote Shakespeare's plays. The finished multiple brief, written or oral, never shows the extent of this work, nor how much interesting but nonessential material was left out.

b. Condensing Material: Having found, for example, a statistical report from the U.S. Department of Agriculture which seems pertinent to the subject under investigation, the briefer must condense the material, as demonstrated in the first portion of this section. He may make a sentence summary, an outline, a précis, or simply a thesis sentence statement, but he will use some form of note-taking to brief the material.

Other materials are briefed in turn. An article which has one idea worth using, but not much else, may be briefed with a thesis sentence statement. A sermon might contain a useful argument, the main outlines of which should be preserved. A précis would be satisfactory. A proposed farm bill, owing to its importance and complexity, might need outlining or a sentence summary.

c. Evaluating Collected Briefs: When the briefing process is completed, the briefer surveys his notes to decide how he will present the information they contain. There are eight useful questions he should ask himself, in order to evaluate his materials properly.

(1) What is the *object* of this final brief, report, or speech? Information? Persuasion? Problem solving? Recommending action? Testing an idea? Arousing interest? Explaining or demonstrating programs and processes?

(2) What shall this brief *accomplish?*

(3) What areas shall be *covered?* What areas *omitted?*

(4) How much *detail* should be included?

(5) What, essentially, *must* be said?

(6) How can it *best* be said?

(7) What *response* is desired from readers or listeners?

(8) What *action,* if any, is desired from readers or listeners?

These test questions will not only help the briefer evaluate the relative worth of his materials, but they will also aid in the next step.

d. Organizing the Materials: When the briefer knows what the focus of attention will be, what he must include, how he must phrase it, and what responses he wants, he then begins to shape the material into an integrated, abbreviated, and comprehensible form. The principles of composing a speech, discussed in Section 1, apply here in the same way that they do there. The briefer must *introduce* his subject, he must *discuss* it adequately, and he must *conclude* or *summarize* the discussion. Outlining will help the briefer, the reader, and the listener to have a clearer idea of the main points and the central idea of the brief.

e. Presentation of the Materials: Because a brief of multiple-source materials may be offered to both reading and listening audiences, it is necessary to indicate the presentational differences advisable.

(1) Written Presentation:

(a) Written briefs, whether of a single article or of large groups of integrated materials, may be presented in outline form, if it is particularly desirable that the main points stand out sharply and that subordinate relationships be clearly indicated. This skeletal presentation has much to recommend it, but many people are not accustomed to reading outlines and may be annoyed by the form.

(b) Frequently, more interest and better understanding can be obtained if the outlined material is converted into a prose report which can be read, just as one might read a newspaper. If wordiness and lack of transition are avoided, the readability of the outlined material will be considerably increased for many readers with this method. If the report is, as are most, more than a one- or two-paragraph précis, it will be necessary to use a heading system, which, as in the outline, calls attention to main points and subordinate details. There are a variety of systems which may be used.

(i) Centered Headings:

FIRST ORDER HEADINGS

Capital letters underlined.

SECOND ORDER HEADINGS

Capital letters not underlined.

<u>Third Order Headings</u>

Only initial letters capital, all letters underlined.

Fourth Order Headings

Initial letters capitalized, no underlining.

(ii) Flush-left Headings: Using the headings above, text can be set off by beginning the paragraph with the heading flush-left. The heading may either lead directly into the material or be two spaces above the text.

(iii) A modified outline system, such as that used in this book, may be used.

A. <u>HEADING</u>: Followed by text.
  1. HEADING: Text.
    a. <u>Heading</u>: Text.
      (1) Heading: Text.

The modified outline system preserves the skeletal values of the outline, but also offers the convenience of a prose reading text.

(iv) Many military and business organizations have a standard form set up for submission of briefs. If no such mandatory form is available to the briefer, one of the above or one of his own invention may serve. The principle is to move from ideas of major importance to ideas of minor importance in the process of subordination. Move from capital letters to lower case letters. Move from Roman numerals to Latin capitals, from Arabic numerals to lower case letters. Use underlining, or italics, for most important ideas.

(c) Whether the brief be outlined or presented in paragraph form, the basic rules of punctuation, word usage, spelling, and sentence structure must be observed. The brief, or report, should also be as neatly prepared and presented as possible. If it is sloppily prepared, poorly typed on a cheap grade of paper, it will be difficult to read and may create an unfavorable impression. First impressions are just as important to a brief as they are to a young job-seeker. To add to the communication value of the brief, it may be necessary

to include graphs, charts, maps, or statistical tables to clarify points which may need more explanation or documentation than they are given in the text. Any visual aids which can be useful to the brief as clarification will also give the brief a more attractive appearance. Section 2 contains suggestions on the use of visual aids.

(2) Oral Presentation: Though this subject will be more fully discussed in the next major division of this section, it is necessary to point out that the prose form thought most acceptable for the presentation of a written brief will not always be appropriate as a basis for an oral briefing of the same materials. The oral briefer has to make certain his audience has understood what he has said, and he should also ensure that they will remember it. This means that an oral briefing will have to be much more simplified and more repetitious than a written briefing of the same topic. The purpose of both the written and the oral brief is usually the same, basically, but the method by which the material is conveyed to the audience—and, one hopes, retained by them—must necessarily be different.

Just as most speakers must avoid reading a written speech, so must the oral briefer avoid reading written briefs aloud. His oral briefing, in addition to conveying condensed information, must be as lively, as immediate as an impromptu talk or spirited conversation. A written or "literary" text, by its complexity and style, will hurt the briefer's natural ability to communicate with his audience.

B. ORAL BRIEFING

1. PURPOSE: Oral briefings may be merely informational, but they are also frequently instructional in intent.

a. Informational Briefing: If communicating information is the purpose, the briefer, in delivering his condensed and simplified version of the materials, may only attempt to familiarize his audience with the topic. Whether they remember the information or not is not the principal concern of the briefer. Rather, he must concentrate on communication of the materials in the shortest possible time and in the most understandable form available. This type of briefing is generally used when a military staff is being familiarized with the progress of a battle, or an industrial group with production gains. The audience, because of prior training in listening and its experience with and inter-

est in the topic, is highly specialized. Such audiences are "professional." It is their business to remember.

b. Instructional Briefing: More often, the briefer has to make certain that his audience will not only hear and understand his condensation, but that they will also remember it. The briefings given to flight crews, to military patrols, to salesmen on a new compaign, to political workers, or to clerical personnel are of this genre. The groups must not only be familiarized with procedures; they must leave the briefing with the procedures firmly imprinted in their minds, if they are to do their jobs well.

To the briefer, both as composer of the brief's outline and deliverer of the oral brief, the demands of this kind of briefing situation mean that he will not be able to condense the material as much as he could for the first type of oral briefing. To instruct, one must be sure that the principle has been understood before continuing to new material. To do this, a mere statement of the principle, followed by an entirely new idea, would not suffice, for it would be remembered by few, understood by only the most alert, and would be confusing in the extreme to the majority of listeners. The briefer must sacrifice brevity for comprehension. He will wisely use repetition to help fix the concepts, procedures, or data accurately and firmly in his audience's minds. He will judiciously employ illustrations, examples, and anecdotes which help to clarify and add interest to the material.

The importance of visual aids in such briefings cannot be sufficiently stressed. Aids can be the key to success or failure. If the audience can *see* the complex procedure clearly and cleverly displayed on a large chart, the job of the briefer will not be nearly so complicated, nor will remembering the important points be so difficult for the audience.

2. MATERIAL TO BE BRIEFED:

a. One Source: The portion of this discussion concerning the written brief dealt extensively with the problem of condensing one article only. Seldom will the oral briefer have occasion to limit himself to one piece of writing or one source in his presentation, unless he is briefing a report, which may itself be a brief of a number of sources. Some sample situations in which single bodies of writing may be used for oral briefs are (1) giving a condensation of a recent book—fiction or nonfiction—which the audience will not have time to read; (2) presenting a brief of a long and/or complex report to which the audience may not have ac-

cess, or for which the group may not have reading time; (3) briefing a new legislative code for an audience which needs to know the principles and specific provisions of the law in *plain language,* without the legalistic jargon.

b. Several Sources: Oral briefings, just like written reports, are more often concerned with conveying a number of articles, interpretations, bodies of data, or systems of procedure. These varied materials must be integrated and concentrated so that they actually fit together in one briefing and can be understood. A good example of such a briefing might be a company sales meeting where reports from five different territories, a new statement of policy, and two new sales procedures might be briefed and brought together into one organized presentation. A classic example in the military services is the briefing prior to a flying mission. Here, the mission or goal must be stressed, the procedures reviewed, the dangers indicated, and the all-important data of flight conditions carefully enumerated. All these materials are related, but not closely, in their natural states. It is the briefer's task to see that they make an integrated, interdependent unit when they are presented.

3. PRESENTATION PROBLEMS: The section on written briefing has already dealt in detail with the steps used in condensing material without destroying its fundamental purpose and meaning. Considerations peculiar to organizing varied materials into a unified written brief have also been considered.

Oral briefing is a different situation, in that the members of the audience are listening, not reading. They can no longer go back and read over a sentence they do not understand. They cannot wait until a later time when they will feel more like studying the brief. Reading is active; listening is often passive. Audiences may not favorably receive a composition read aloud.

Begin preparation for an oral briefing by first making a written brief. The written brief should be drawn up in outline form, since that is the most useful to a speaker in delivery. No matter how brilliantly the material is organized, condensed, or developed in an outline, it cannot be a success orally without good presentation. Oral briefing should not be oral reading. You must *deliver* your brief, not as a prepared script, but as though you are talking from an intimate, personal knowledge of the material. And you will be doing just that, if you have

spent the proper time and effort on the written brief. As in an ordinary speech situation—one in which a great statement of official policy is *not* being made—the outline serves as speaker's notes to remind you of your next point, to provide some specific data, or to help you keep the general plan of discussion in mind. The real brief is that which comes from your lips in your own words, spoken with naturalness and sincerity. Of course, if the brief is to convey the exact content of an official statement, it may have to be read, just as a President's address is read.

Rules for speech composition and delivery, treated in Section 1, are most pertinent to the presentation of effective oral briefs. The Air Force has devised nine keys to more successful briefings, which are useful supplements to the principles in Section 1. Briefers should keep the nine keys in mind, both when drafting the outline and when actually delivering the oral brief. Each one could be the difference between success and failure. The keys are these: (1) Keep it *direct.* (2) Make it *effective.* (3) Be sure it is *factual.* (4) Make it *stimulating.* (5) Work to get it *integrated.* (6) Keep it *dynamic.* (7) Make it *convincing.* (8) See that it is *imaginative.* (9) Be sure it is *meaningful.*[2]

Essentially, oral briefing as a speech problem is not different from any other formal speech situation. The briefer must always make a good audience analysis, so he can be certain his condensation and simplification of the material will be satisfactory. He must be sure he has done well by his materials. He must give his delivery the attention that both the subject and the audience demand. The purpose of the briefing is to save time, or to clarify. If the briefer spoils his material with bad delivery, all the careful written preparation will have been wasted, and worse, the audience will also have wasted its valuable time.

4. GROUP BRIEFINGS: Usually, one person will present an oral briefing for reasons of convenience, audience attention, and economy of time and effort. There are occasions, however, when it will be necessary to have a group of briefers.

Such situations are more common in military organizations, but they are encountered in business and professional associations also. Even social groups may employ this method of reviewing important bodies of material. Examples are again the briefing of a flight crew, or the briefing of a group of salesmen. Groups of briefers may be used

[2] U. S. Air Force, *Presentations,* Washington, 1956, p. 4.

for these groups because the information to be communicated is of several specialized sorts. Each of the briefers is a specialist, and it is therefore easier for him to condense the material in his own field, than to have one man try to condense a variety of specialized materials. In highly technical undertakings, few men are sufficiently conversant with all aspects of the work to make a unified brief without assistance from technical specialists.

In a group briefing, it is not enough to let each specialist get up and give a résumé of what his section has to offer. That would be much the same as sifting four or five unrelated written briefs through your fingers. There must be a central controlling purpose. There must be organization—effective organization. There must be clear indication of interrelationships between the briefs. This is the task of the master briefer.

One man must be responsible for deciding what the governing purpose will be, what material will be included, who will give the material, in what order the briefs will be presented, and how they will be related to each other. This master briefer, at the time of presentation, is the man who introduces the subject and controls the progress of the oral briefing. When he has properly oriented his audience, he introduces the first briefer, indicating what the individual briefer's contribution is designed to add to the over-all brief. This helps to focus the audience's attention on the most significant information in the separate briefs, keeping the general purpose clearly in mind. When a subordinate briefer has finished, the master briefer, by summarizing what has just been said, again indicates how the brief was related to the problem. This useful repetition helps fix the material in the minds of the audience. In introducing the second subordinate briefer, the master briefer indicates his relation to the first brief and to the entire problem. At the close of the second brief, another summary and interpretation is given by the master briefer. This process is followed for all the subordinate briefs. At the close, the master briefer gives a complete summary of all that has been covered, but he does not try to duplicate the specialists' presentations offered by his aides. He makes the sort of basic summary he would like the audience to make and remember.

In speech situations, it is said that the speaker always has the stage. When a group is briefing a subject, this may present a new problem: Who has the stage? The master briefer? The individual speakers, in turn? All the briefers?

The method of presenting a single briefer or a number of speakers in a group briefing will have to depend on what facilities are available and the kind of attention the audience will give. What is needed for one briefer is also needed for several, so the problem will be treated as that of group briefing, which has a few added complications.

Particularly with social and professional organizations, the group briefing will usually take place within the frame of a regular meeting, and the group's master briefer will also be the chairman or president of the organization. He may be seated at a central table or standing behind a rostrum, placed in front of the members. The various committee heads—who are usually the subordinate briefers in this form of group briefing—may be seated in chairs ranged in a semi-circle on either side of the chairman, facing the audience. As each committee head is called on by the chairman to give a short summary of the activities and plans of his group, he rises to make his report. If the chairman is seated at a central table, the committee head may speak from a standing position by his chair. If a rostrum is used, the chairman may temporarily relinquish it to the committee head. In either case, the committee head will be more favorably placed for delivery of his brief than he would be if he remained seated.

In a sales meeting, it might be necessary for the briefing group to use maps, charts, motion pictures, or other audio-visual aids. This means that the briefers cannot occupy the center of the stage, as they could in a social meeting. The platform or stage must be left free for speaker activity. In such cases, the master briefer may have a rostrum on the right or left side of the main speaking area, from which he can control the briefing. He will stand when he is speaking, but may remain seated during the talks of the subordinate briefers. The other speakers, who may be using aids, will speak from the central area, unhampered by chairs, rostrums, or tables. They need to be free to use their aids.

In group briefing, it may be desirable to have all the briefers seated on the stage. This arrangement makes them easy to introduce to the audience and permits them to be readily available. To leave the central area free, their chairs could be arranged in a slanting row on the opposite side of the stage from the master briefer's rostrum. This way, they can be seen by the audience, but they do not block the speaking area or the audio-visual aid displays.

Sometimes, the audience might be unduly interested in silent people

sitting on the stage, waiting their turn to speak. The seated briefers could be a possible source of distraction from the main interest. If possible, the master briefer should then arrange to reserve some front-row seats for the subordinate briefers, or if a stage is being used, have them wait offstage until called for. This method has the advantage of adding a bit of drama to the presentation. Each subordinate briefer may then be in the nature of a surprise to the audience. If they know who is going to speak beforehand, they may be prepared to be bored by some, annoyed by others, and amused by still others. They may be seriously disappointed in their expectations, but the master briefer can avoid all this and keep the audience's attention on the main issues by concealing the panel of briefers until they are needed.

Occasionally, particularly in military situations, it may become necessary for the briefers to abandon the speaker's rostrum. In conferences, for instance, briefings may be required when all members are seated at a conference table. When audio-visual aids are to be used, it may be advisable for the briefers to stand when delivering their material. Ordinarily, to preserve the continuity of group discussion, it is better for the briefers to remain seated and present their briefs merely as another contribution to the discussion. This helps to build the sense of interrelationship among the conferees.

Another situation which may require unorthodox staging may occur when it is necessary to use a flat-surface visual aid such as a terrain map, or when the auditors must gather round an object, a piece of machinery, or a collection of materials and examine them as the brief is being given. Again, this form of briefing must be used many times in the military services. Persons to be briefed may be seated around the aid, or they may stand, whichever is most suited to the kind of examination they must give the aid. When large groups must study the aid, and the briefing situation is frequently encountered, seats may be permanently set up in circular tiers around the aid so that everyone will be able to see well.

A special kind of group briefing is that encountered when one person or a group of persons must be taken on a walking visit or inspection of a factory, office, power project, or similar operation. The master briefer will be, variously, the plant manager, a public relations agent, the supervising engineer, or the officer-in-charge. He must impress on the visitors the over-all mission and functions of the particular operation being inspected. He also provides continuity while guiding

the group from unit to unit in the factory, office, or project. At each separate unit, the subordinate in charge will usually be asked to brief the visitors on the duties and operations of the particular section. Once again, in military situations, this form of group briefing can reach a very high degree of perfection, for tours of inspection occur frequently, and it is vital to all personnel that their particular office, unit, section, or project be viewed in the most favorable light possible.

Important group briefings which are to be presented to large audiences, or to be repeated a number of times, or to be presented to Very Important People, should be rehearsed beforehand to make certain that all the rough edges have been polished off. A group briefing is a production, much as is a play; and if it is to receive the success it merits, it must be planned, produced, and rehearsed—always with the audience in mind.

III. Conclusion

A. SUMMARY

1. BRIEFING is the process of preparing (written briefing) and/or presenting (oral briefing) lengthy or complex bodies of material in the best-organized and most condensed form favorable to effective communication in the shortest time.

2. WRITTEN BRIEFING may be used for condensing and simplifying one source or a group of sources.

a. Available Tools: Four tools are available to the briefer of the single source.

(1) Sentence Summary: This reduces each paragraph of the original article to a topic sentence.
(2) Outlining: This strips an article of its literary embellishments to reveal the structural skeleton.
(3) Précis Writing: This "boils down" an article to a paragraph synopsis.
(4) Thesis Sentence Statement: This reduces an article to one sentence, stating the essence of the piece.

b. Check Steps in Briefing: The briefer of a group of sources has five check steps to help him with his job.

(1) Gathering Materials: Doing this carefully allows the briefer to

select enough information to render his brief clear to readers or listeners.

(2) Condensing Materials: Following the methods listed above will enable the briefer to get his sources into manageable form.

(3) Evaluating Materials: This process helps him to decide how to use the sources he picks.

(4) Organizing Materials: Good organization demands that he structure his sources so that maximum understanding will be possible in the least amount of time.

(5) Presenting Materials: Written or oral presentation requires the adoption of presentation devices which will make important points stand out and remain vividly impressed on the minds of readers and/or listeners.

3. ORAL BRIEFING: This is primarily a presentation problem, some form of written briefing having already been made as a preparation.

a. The Single Briefer: By presenting a single article or groups of articles, the single briefer will employ principles of effective public address to reach his audience.

b. The Group of Briefers: Each one of the group has a single brief to offer, using principles of good public speaking; all must also be organized under the control of a master briefer to assure maximum effectiveness.

B. SUCCESS IN BRIEFING: The rules, the tools, and the suggestions can do much to make possible an effective briefing, but they cannot guarantee it. Ultimately, the ability of the briefer to use these aids with ingenuity, imagination, and foresight will be the crucial element in successful briefing.

SECTION 4 | Conference Techniques

PURPOSE: To discuss conference methods which are effective for group exchange of ideas and problem-solving, using the first three sections as important aids.

I. Introduction

A. IMPORTANCE OF GROUP DISCUSSION: Primarily because the American governmental system is "of the people, by the people and for the people," group discussion has become increasingly important as the nation has grown. A democracy as large as the United States must obviously be a representative one. All the citizens cannot go to Washington to register their opinions individually, but they can, by intelligent group discussion, evolve statements of policy or programs of action that they wish their representatives to follow. In the processes of business, professional, and community life, as well as in government, discussion methods daily prove invaluable in helping groups of people to solve problems democratically. The very idea of discussion is the essence of democracy, being so obviously counter to the "direct order" of a dictatorship.

B. REQUIREMENTS FOR GROUP DISCUSSION: It may generally be said that group discussion requires four ingredients for success:[1] (1) It must have an impartial leader; (2) it must have participants who are prepared and interested in considering the proposed problem; (3) it must be kept relatively informal; and (4) it must have plan and purpose.

[1] See H. L. Eubank and J. J. Auer, *Discussion and Debate,* Appleton-Century-Crofts, Inc., New York, 1946; W. S. Howell and D. K. Smith, *Discussion,* The Macmillan Company, New York, 1957; and *Armed Forces Discussion Leaders' Guide,* Office of Defense, Washington, 1950.

Unlike the lecture, wherein the speaker or leader does all the talking, or the instructional session, in which the speaker may use half the time for lecture and half for questions and contributions from his audience, the group discussion situation requires that all members contribute more or less equally, so that they are all thinking the problem out together. The discussion leader acts only as a monitor to help guide the thinking so it doesn't wander aimlessly as ordinary conversation or "bull sessions" are likely to do. He is also a referee who must ensure that all have ample opportunity to participate, that disputes are amicably resolved, and that the democratic principle of rule of the majority is preserved without violating the rights of the minority.

Essentially, group discussion may be said to be "directed conversation," with a number of interested persons "thinking out loud" to exchange opinions, get ideas, or solve problems.

C. TYPES OF GROUP DISCUSSION: Though this section will treat only conferences in detail, it will be useful to review the other types of group discussion to show how conferences relate to them. Group discussions may be easily divided into two classes, formal and informal.

1. FORMAL DISCUSSIONS: An essential quality of good discussion is informality, and that quality can be preserved within the formal group meeting, which is formal only in the sense that it follows a definite pattern and has an audience. Among the most familiar patterns for formal group meetings are the Panel, the Symposium, the Forum, the Colloquy, the Public Hearing, the Debate, and the Legislative Session.

   a. The Panel: Good panels require a leader who acts as a moderator for the other participants, usually ranging in number from four to six and seated so that they can see each other and the audience. The discussion opens with a brief statement by the leader, who poses the question for consideration and introduces the participants, so that the audience may know their qualifications to discuss the topic.

   Members are usually chosen because they not only have some worthwhile information or ideas to offer but also because they will represent varying points of view. The discussion should give the impression of natural, easy conversation which reviews or examines the topic. It is not necessary for the participants to arrive at any definite conclusions, though they often do so. There is a great deal to be

learned by both the participants and the audience when intelligent, informed, and interested people earnestly discuss a topic in the informal atmosphere of a panel. Of course, many panel discussions presented for audiences, whether the listeners be physically present or only radio-TV audiences, are rather carefully rehearsed beforehand. But at least the illusion of informality and spontaneity is retained. The famed "University of Chicago Round Table" is an example of a rehearsed panel discussion.

Alert audiences, stimulated by the discussion, are usually anxious to ask questions or state their own ideas. Recognizing the importance of this expression of opinion in further illuminating the topic, most panel organizers allow for a general question period or *forum* at the close of the formal discussion. The leader summarizes the discussion and calls for questions from the audience. It is here that even the most carefully rehearsed panel will be forced to be really informal and spontaneous. When discussion meetings are announced as "panel-forums," one may expect an informal, possibly rehearsed, discussion of the topic by experts, followed by an audience question and comment period.

b. The Symposium: More formal than the panel, the symposium is strongly similar to it. It is opened by a leader, or moderator, who announces the subject under discussion and gives a general introduction of the participants, usually two to four in number and chosen because of their acknowledged position as experts or as exponents for varying points of view on the topic. Again, participants are seated so that they can see each other and the audience can see them. Usually the chairman will sit in the middle, separating "pro" and "con" speakers. Though symposiums may be convoked merely for exploration of a topic, they are usually designed so that half the speakers will be "pro" and half the speakers "con." This helps to provoke more lively exchange of ideas. Each speaker makes a short formal statement of his stand on the topic, after which the speakers engage in a question-and-answer period with each other. Frequently, the discussion can become heated, so the moderator must be really alert to moderate the tempers and expressions of opinion.

As in the panel, this exchange of ideas and opinions usually whets the audience's appetite for a question period so they can either get more clarification or challenge a speaker. Following the speaker-audience forum, the speakers may make short summaries of their

positions and beliefs. The moderator, closing the meeting, makes an over-all summary of the results of the discussion.

c. The Forum: Though the name *forum* is often used to designate the audience question-and-comment period following panels and symposiums, it also refers to a formal group discussion which combines the qualities of a panel and a symposium. Seating arrangements resemble those of the panel. The forum is opened by the leader with an introduction of the topic and the speakers. Each speaker, as in the symposium, then gives a short prepared speech, though these are not necessarily pro and con. Next, the speakers engage in an informal discussion of the topic, as in the panel. Following this, is a period of informal participation by the audience, with discussion and comment exchanged between audience and speakers. The meeting is closed with a summary by the leader.

d. The Colloquy: The participants sit facing the audience. The leader is seated at a small table between two longer tables, which are angled so the speakers can see each other as well as the audience. On one side is a board of experts. On the other is a representative panel chosen from the audience. The leader announces the topic of discussion, introduces the participants, and then opens the meeting for questions and answers. With the colloquy, the questions are able to save time for all because they ask for information or clarification of what is not known or understood, rather than have the experts use valuable time in a formal speech, the content of which may already be familiar to the group.

e. The Public Hearing: The hearing, with its panel of questioners and its "experts," might be considered a variety of colloquy. The American public became familiar with this form of discussion during the Army-McCarthy hearings and the Kefauver crime hearings. It formally differs from the colloquy in that the leader usually is one of the questioners, instead of a moderator, and in that the experts are summoned one at a time.

The goals of the hearing are usually the compilation of evidence and/or opinion which can be used as a basis for legislative, executive, or judicial action to solve a given problem. Seating arrangements for public hearings may vary. Though the experts are not on trial, a courtroom atmosphere often prevails. The committee may sit at a table facing the audience. Between the audience and the questioners, the expert will sit where all may see him.

f. The Debate: Perhaps the most formal of group discussions, debate may be said to have purposes other than those announced for informal discussions. Debate has a fairly rigid pattern for the expression of the participants' views. In addition, it requires an affirmative and a negative side and usually has a decision in favor of one side or the other as its ultimate goal. Even the seating arrangements, with affirmative and negative speakers placed on opposite sides facing the audience, tends to encourage contention. In such a competitive atmosphere, the interest of the debaters and the audience unfortunately may be focused on *winning the debate,* rather than having an honest, thoughtful, and searching examination of the topic. While all other forms of group discussion, even those which encourage strong expressions of differing opinion, essentially seek understanding, compromise, and ultimate solution of problems, debate encourages passionate opposition to compromise by its participants. Debate can develop the ability to argue feelingly and convincingly on both sides of a question. Such training is extremely useful to lawyers and politicians.

g. The Legislative Session: Unlike the professional debate, the legislative session uses debate as a means of arriving at understanding, compromise, and solution. In the professional debating match, the affirmative speakers and the negative speakers often have, privately, an Olympian detachment from their subject. Their jobs are to win, regardless of their true feelings. In legislative debate, the affirmative speakers, it may be assumed, really believe in the bills they are urging for adoption. The negative speakers are just as earnestly convinced that the bills ought not to become law. Because compromise and the rule of the majority are the essence of democratic government, both sides will moderate their demands and their views in order to arrive at legal solutions which will be sound and beneficial to the electorate. If they do not, they may not be returned to office. Anyone who has visited the United States Senate or House of Representatives is aware of the parliamentary formality of this type of group discussion. Despite the rigid procedural rules, the traditions of legislative debate allow considerable freedom in the expression and exchange of opinion.

2. INFORMAL DISCUSSIONS: The most important distinction between formal and informal discussions is that there is no audience for the latter; except in so far as the participants themselves constitute

FIGURE 4–1. This town meeting in Vermont is one of the best examples of democratic government through group discussion. People from all walks of life pool their information and ideas to solve problems for the good of all. (Courtesy of Standard Oil Co., N.J.)

an audience for each other. Informal group discussions allow all present to contribute to the group's analysis and solution of the problem under consideration. In some discussions, participation is, in fact, required. It is to this group that conferences belong. Because conferences will be treated in detail in the body of this section, they will not be reviewed here. Other types of informal discussion are (1) the Informal Group Discussion, (2) the Cooperative Investigation, and (3) the Committee Meeting.

a. The Informal Group Discussion: The well-known "bull session" may be considered an example of this type. The bull session, as ordinary conversation, however, has no necessary pattern, purpose, topic of discussion, or leader.

Most good informal discussions are directed or guided by a leader chosen by the group. The group concerns itself with the examination

of only *one* topic. Effective informal group discussion will seldom involve more than fifteen or twenty people, if everyone is to have several opportunities to express his opinions. For most effective interchange, it is always advisable to seat the participants so that they can all see each other. Seating in an open circle or at a round table is ideal, for all seats are then equally important in position. Using a long table tends to polarize the ends, giving the people seated at either end dominant positions. This can encourage a psychological inequality of which some unscrupulous persons may be quick to take advantage. Ranging the participants in rows facing the leader one behind the other is even worse. It focuses all attention on the leader and destroys the group sense of co-working, since most will not be able to *see* the various speakers without some physical contortions, and this ruins the easy informality of the conversational situation.

The participants will talk over some problem or topic which is of interest and importance to the group. They may or may not arrive at solutions. If they do, they may or may not be able to implement them. The power of this group to act is not the important factor; it is rather the ability of this group to examine a subject in a friendly spirit of cooperation which is valuable.

b. The Cooperative Investigation: This may grow out of the discussion of the informal group. Here, the participants agree to make thorough private investigations into specific aspects of the topic, so that the group's collective knowledge will be increased prior to actual discussion. After a set period of fact finding, reading, and thinking, the group reconvenes. The leader calls for brief reports on each member's investigation. When each has contributed to a clearer understanding of the problem, the group begins the interchange of ideas and opinions which may lead to suggestions for solutions for the problems.

c. The Committee Meeting: Usually associated with a parliamentary organization, the committee's job is to take a portion of a larger problem and complete the first steps of analysis and solution to save the parent body needless deliberation. Without the committee method of discussion and problem-solving. Congress would never be able to even scratch the surface of its agenda. Most clubs and professional organizations would probably not be able to carry on their social and business programs were it not for the committee.

Almost everyone has been a committee member at one time or an-

other, even if it was only the committee in charge of cleaning up the gym after the Junior Prom. The planning of a high school dance, though perhaps a frivolous topic, is an excellent example of how committee discussion works. Chairmen are selected or volunteer to work out the details of finance, refreshments, entertainment, decorating, advertising, ticket sales, physical arrangements, reception, and clean-up. The chairmen, with small committees, usually less than ten, then conduct an informal group discussion with the goal of choosing several acceptable plans of decoration, financing, or staging the dance. When the minor problems have been thoroughly "hashed out" in committee, the committee chairman reports back to the parent body, and discussion is held on the proposals of the committee. Further argument and compromise are usually needed, but the committee has already saved a lot of needless discussion. When the group has approved a course of action, the committee goes into session again to find the best method of reaching the goal, thus saving more hours of unnecessary deliberation for the parent body.

The importance of keeping the informal group discussion feeling in committee cannot be stressed too much. The chairman who decides to play God or Caligula will find himself without a committee and without workers. The purpose of the committee is to solve problems cooperatively, not to provide slave laborers for someone with a dictator complex.

II. Discussion of Conferences

A. TYPES OF CONFERENCES: Conferences partake of aspects of all three of the informal discussion meetings mentioned above. Because there are several distinct purposes for which conferences can be used, the format of one conference will not be like that of another. One may have more of the qualities of a cooperative investigation. Another will be more like a committee meeting. There are five types of conferences much in evidence today, particularly in business, military affairs, government, diplomacy, and professional activities. These will be briefly discussed in order: (1) Informational Conferences, (2) Training Conferences, (3) Problem-solving Conferences, (4) Ideational, or "Brainstorming," conferences, and (5) Conferences Which Are Not Conferences, but "black sheep."

1. INFORMATIONAL CONFERENCES: A true informational conference is a specifically scheduled meeting without audience at which all participants seek to share their personal knowledge or experience with

the others present. The goal of this type of group discussion is the accumulation of knowledge, which in turn may make both the group and the individuals composing it more efficient in their thinking or their work.

An example of an informational conference is a group discussion of travel advantages for young people in various European countries. The members, possibly each one familiar with the particular delights of a different country, can bring together a great deal of useful information, at the same time comparing and contrasting the experiences and opinions of others with their own. A student who has traveled in Spain but who does not know Sweden will help the others by telling his observations on Spain, and he will in turn be helped by someone who has recently visited Sweden. It must be remembered that the goal of such an informational conference is not problem-solving; the group is *not* trying to decide which country offers most, or which tour would be least expensive.

The informational conference differs from the problem-solving conference in that its goal is information only, not isolation, examination, and solution of a problem. It may, however, concern itself with the enlargement of group knowledge concerning an existing problem. When such is the case, it has actually at least one of the goals of a problem-solving conference—that of examination of causes and effects of the problem.

An informational conference on farm drought, for instance, would seek to reveal accurate, useful reports concerning the extent of the drought and the crop and money losses, and might possibly provide expert predictions for the future. If any solutions have been proposed or tried, these will be brought to the attention of the group, but not for the group to approve, condemn, or act upon. The group is merely pooling its information to arrive at a fuller and richer understanding of the basic problem. This meeting *may* lead to a series of problem-solving conferences, once the members have become sufficiently well acquainted with all aspects of the difficulty, but it is not designed to solve any problems.

The difference between gathering information and solving problems must be insisted upon because confusion of types or goals can lead to a defective solution of the problem. If a purely informational discussion finds itself transformed into a problem-solving conference, possibly because of the seriousness of the problem and the immediate interest of

the participants, the discussion may well fail of its purpose. To solve a problem, as will be shown later in this section, one must follow a rather rigid plan of analysis as a guard against loose thinking, emotional evaluations, and hasty solutions.

It is the responsibility of the informational conference leader to hold the group to the topic, discussion plan, and goal originally announced. If the group seems seriously interested in solving problems which have been revealed during the mutual compilation of information, then the leader should secure the group's agreement to adjourn and reconvene at a later time for a formal problem-solving conference. The informational conference will not have been wasted time, for it will have helped disclose the problem and it will also have made the group more familiar with the situation, more able to discuss and possibly solve the problem intelligently. Usually, a new conference cannot be called at once, because the leader must have time to think out a possible list of agenda, and the members of the conference will have to do some preparatory analytical thinking of their own.

Ordinarily the leader's job is not so complicated. The group will usually be composed of people who know something about the topic, even if only a specialized part of it. The leader wants to draw out the unique contribution each member has to offer so he and the rest of the group will learn more. In planning for the meeting, he will decide upon a discussion method which will call forth the information in an organized fashion.

In the foreign travel conference, for example, the leader might use a geographical method of discussing the topic, calling on the representative from each country in turn. Or he might break the discussion down into consideration of (1) historical sights, (2) natural beauties, (3) interesting customs, (4) cities worth visiting. The latter method might be better, for it would provide a more frequent change of speaker. The first method encourages formal speeches, which are never desirable where informal directed conversation is the goal.

Methods of organization, treated in Section 3 on Written and Oral Briefing Techniques, are all possibilities for the leader of the informational conference. It cannot be too strongly emphasized that he must have a definite plan for disclosing the group's information; otherwise, much will be forgotten because it did not stand out clearly or was not offered at the psychologically right time.

In addition to the plan, which will help the group to present the in-

formation in an organized way, the leader should be aware of the qualifications of the members so that he can anticipate at least some of their possible contributions. He cannot know *what* or *how much* they know, but he can have some idea of the area in which their knowledge and experience lie. During the discussion, he will, wherever possible, try to keep the conversational ball rolling by passing the discussion from person to person. He should always be alert for unexpected contributions from members who may possess unexpected knowledge or insights.

The leader here is a monitor, not a mentor, so he tries to get as much useful information *out of the group* as he can, rather than air his own ideas. He makes frequent summaries to ensure that this information is going back *into the group again*. Because he is not a mentor, he does not scold participants for opinions he disagrees with, nor does he seek to dispute the validity of facts. He may ask politely for verification, but he would never cast doubt on the veracity of a member, if he wants to keep the free, informal flow of conversation going.

For a person who likes to argue, who has strong opinions, and who has a rich store of knowledge and experience, the job of informational conference leader can be most difficult. The leader guides and listens. His remarks are usually to encourage members, advance the discussion, or summarize what has been said. He should not treat the conference as a captive audience convoked to hear him pontificate.

Participants in informational conferences have the obligation to prepare beforehand. They will know the topic to be discussed, and usually, they will have been told what in their training or experience suggested them as valuable conference members. Knowing these things, they will have some guide for their preparation. In addition to giving the topic a general review, they should be especially careful to have their own possible contributions, in the form of statistics, reports, illustrations, experiences, observations, opinions, and beliefs well in hand. Possibly, significant facts or important statements of theory should be written down on speaker's note cards so that the participants will not waste the group's time, fumbling for a verbal formulation or an accurate recollection of vital statistics. Participants should approach such an informational or fact-finding conference with open minds and a spirit of cooperation. The conferee who has already made up his mind, who thinks he has all the answers, and who has no respect for the knowledge or experience of other conferees will hurt the conference—and himself.

Beforehand preparation for the conferees does not mean that they, like the chairman, must map out a list of agenda for discussion or prepare formal speeches dealing with their special phase of the topic. If this were to happen, the spontaneous, informal quality would be lost completely. The conferees are merely getting their materials and minds into condition for a lively, interesting exchange of facts and ideas.

When the plan of discussion and the offerings of the participants become formal, studied, and carefully prepared, the result is apt to be more like a panel or symposium. Many so-called conferences are actually a series of lectures, panels, symposiums, and committees convoked under the name "conference." Such affairs are informational conferences only in the general sense that a more or less closed group—one not performing for a lay audience—is gathering to exchange ideas and information. The individual sessions all too often resemble teaching rather than discussion. The name *conference* is being misused. Actually *convention, institute,* or *workshop* are all better descriptive terms for such sessions, since a true informational conference is a single, closed meeting convened for the purpose of exchanging facts and ideas on equal terms.

2. TRAINING CONFERENCES: This form of group discussion may resemble the informational or the problem-solving conference in method or materials considered, but it has a different purpose. Where participants in informational conferences are trading materials exclusively, and problem-solvers are seeking solutions to difficulties, the training conference member is learning a *method* by participating in the conference. It is essentially a "learning by doing" situation in which a number of people learn at the same time, under the guidance of a leader-teacher, by using a method or by watching someone else use it.

   Most commonly used in training conferences is the problem-solving method, but the solution is not so important as learning the steps used in reaching the solution. Perhaps the problem is an old one and the accepted solution is familiar to all. The leader-teacher-supervisor can still make good use of it to train the analytical abilities of his participants.

   He could, if he were a personnel manager or a military commander, set up a lecture situation in which an instructor might show the steps taken from the isolation of a problem to the selection of its solution. The lecture is not always as good as a training conference, however, for subordinate executives or commanders may resent the lecture situation and therefore fail to absorb the method that is being taught.

A good example of an effective training conference could be a discussion in which a group of young officers analyzes and refights a famous battle. The leader carefully and tactfully guides the developing conversation so that the participants do not overlook vital considerations; but he does so with restraint, so that the members do their own thinking, suggesting, rejecting, compromising. Chances are that painstaking and intelligent conference work will produce the same solution which history records. Perhaps an even better solution may be presented. The solution is no longer so important as the way in which it was reached. The group has cooperatively solved the problem as a laboratory exercise, instead of being "preached at" in a lecture situation. This kind of learning situation can be immensely superior to the lecture in terms of results, but it is obviously inapplicable to many instructional problems.

Another sort of training conference is the "case study" discussion group. Here the leader may introduce real or fictitious problems for group solution or evaluation. The questions may require decisions that are legal, ethical, or political in nature; but once again, the decision or solution to the case is not of greatest importance. The method of attacking the study, the kinds of information required for solution, and the methods of thinking used in solution are the valuable learning gains from such conferences.

Frequently, in the management field, training conferences may be held which are both informational and problem-solving. A group of supervisors may be asked by the leader how they would deal with the problem of a skilled worker who has an unexplainably high absence rate. The participants are experts; they are not interns. The methods and ideas each supervisor has to offer have been tried and found to be usually effective. But frequently there are methods, known to one and unknown to the others, which may be even more effective.

By discussing possible means of handling the worker's problem, participants may become aware that one of their number has a new approach which is definitely superior to theirs, or at least is worth trying. They can silently ingest this information without revealing that the method is new to them. Often professional men in responsible positions, particularly in highly competitive work, are reluctant to ask for advice, to share ideas, or to disclose any lack of knowledge which could be interpreted by a superior as a sign of weakness or inefficiency. With some men, it is a matter of pride that they "know their job and don't

need any fancy experts to tell them how to do it." The training conference helps take the stigma off such learning, by preserving at least the illusion of equality and cooperation in developing effective methods for dealing with problems. Nobody has been "lectured-at"; no one's ideas or suggestions have been ridiculed or denied consideration. No person has been treated like an ignorant schoolboy.

Ideally, the leader of a training conference should be a supervisor, superior to the participants, a man older, wiser, more responsible. In addition to the respect he commands, his presence is also an encouragement to the participants to present their best thinking in order to impress him with their ability. This will help to guarantee a sharp, alert conference group which will not treat the project as a joke. The leader, as in all other conferences, acts only as a monitor or referee. He sets the stage, gives the conferees the essential information, the statement of the problem; he also clarifies the ground rules of the discussion. After those responsibilities are discharged, he is interested only in keeping the discussion moving steadily toward a solution, with participation by all. His control over the group can be exercised only by questioning, a device which prevents his natural or artificial authority from destroying the democratic nature of the discussion.

Good leaders do not attempt to use the question as a devious bludgeon to get participants to agree with them. If the leader really wants his subordinates to think as he thinks, he should tell them what to think and not waste their time with a mock training conference. The purpose is not to learn to think alike, but *how* to think about problems. At the close of a training session, however, the leader certainly should give the group the benefit of his judgments as an interested observer. He can give a critique in terms of his own ideas and those of other supervisors he knows. In a good training conference, the leader learns new techniques and ideas, too.

Participants, being advised of the nature and subject of the conference, will want to make outside preparation, so that their contributions will be worthwhile and even impressive. They should not seek to *dazzle* their equals and superiors, for the conference is not intended to be a contest, nor is it a showcase. A sincere desire to contribute useful suggestions and a wish to learn from the experience of others will pay off. It earns the respect of fellow participants and makes its owner a more effective member of the group. The ambitious executive or officer cannot afford to close his mind to the ideas and methods of others,

for if he does, he will eventually limit himself to a few time-worn formulas, while other more alert men, garnering knowledge and experience wherever they can, pass him by.

Participants would be ill-advised to display their sincerity and interest by making excessive favorable comment on suggestions presented. The business of the conference is to learn by finding solutions, not to congratulate each other, and the man often given to such expressions may be marked as a nonthinker, trying to ride the ideas of others. Too much enthusiasm over a mediocre idea betrays (1) that this common idea is a new and miraculous discovery to you, and (2) that you have little or no ability to evaluate the true worth of the idea. The participant should let moderation be the rule in his conduct. He wants to learn, but he is being watched by superiors and competitors.

Theoretically, conferences take place in an atmosphere of good will and mutual cooperation, but it is impossible in a naughty world for even the best supervisors not to be watching and comparing the performance of various participants, just as it is difficult for the members not to try and excel each other in their offerings. Leaders should remember this, and try to keep the conference friendly and informal. Participants should remember it, and try to keep their jobs.

3. PROBLEM-SOLVING CONFERENCES:[2] By far the most important form of group discussion is the problem-solving conference. As has been indicated, the work of an informational conference, though having a different goal, often strongly resembles one phase of problem-solving—collection and examination of facts. The training conference usually is nothing more than a problem-solving conference in which the goal has been changed from finding a solution to mastering the methods involved in searching for the answer to the problem. From this, it would seem, and correctly so, that all conferences are at least in part problem-solving conferences. For this reason, only a brief description will be given here, so that the problem-solving method, the effective use of questioning, the duties of the leader, the responsibilities of the participants, and other aspects can later be discussed in detail.

From the name, one might assume that the goals of problem-solving are not always the same because there are so many kinds of problems.

[2] See the discussion texts previously cited, also *Conference Leadership,* Air Force Manual 50–8, Department of the Air Force, Washington, D.C., 1951.

Whatever the problem, however, the conference goal is solution, though it cannot always be reached in one session only. The immediate goals of conferences differ, but solution is still the ultimate goal. Another important consideration is that the solution goal changes as the type of problem changes. Not all problems are of the same order of difficulty; tools and raw materials for solutions may not be equally available; the fundamental nature of the problems may vary. In general, it is agreed that there are three main kinds of problems. They are (1) Problems of Fact, (2) Problems of Belief, and (3) Problems of Policy.

a. Problems of Fact: In its simplest terms, the problem of fact may be nothing more than determining whether an alleged fact is true or not. Were there 75 million bath tubs in American homes in 1940? Did Madame X steal the Top-Secret Code? Was economic rivalry a cause of the Civil War? Can man live without food for two months?

Even these provoking questions show that there can be a striking difference in kinds of fact to be tested. Consulting the United States Census Reports for 1940 will not only reveal the correct number of bath tubs, it will also provide related and useful information. If an alleged fact is incorrect, the correct fact can be immediately ascertained from this simple research. To solve such a problem one man and one book are needed—nothing more.

Whether or not Madame X stole the top-secret code is a knottier problem. It may be confidently asserted by investigators that she did. But there are no *World Almanacs* to give correct answers to such questions, neatly printed on page 2374. This question of fact is going to require an exhaustive comparison and evaluation of evidence and opinion. It is an ideal question for a special type of conference in which all the members have worked on the case and are expert sleuths. Ultimately, even after the conference members have arrived at a solution, "She is guilty," it may be necessary to submit this "fact" to another type of conference group, the jury. The jury, during the presentation of prosecution and defense arguments, is not actually a conference group, but when they retire, after judicial instruction, to consider their verdict, the jurors also are in essence a fact-finding conference. They must review the evidence and the arguments to solve the problem of alleged guilt.

Reference books, which can do so much to resolve a simple question of statistics, are not always as useful in testing the validity of an

assertion such as "Economic rivalry was a cause of the Civil War." The truth-seeker may be surprised to learn that equally famous and thorough historians or political scientists may be in strong opposition, one saying the statement is true, the other saying it is false. Such a question will also lend itself to a conference situation. The group, informed and prepared, can argue the pros and cons of economic influences in North and South and arrive at a conclusion: The statement is true . . . or false.

A conference cannot, even with the best will in the world, solve the problem "Can man live without food for two months?" To test this, laboratory experiments would have to be conducted. The exercise of reason and cooperation by conference members is no substitute for carefully controlled testing and research.

These examples indicate the variety of questions of fact which exist. Only certain kinds of factual questions can be answered in problem-solving conferences, then. Thorough analysis of the "fact" to be confirmed or denied must be made, lest a conference be convened to test the validity of an assertion which could be checked by two minutes' time spent with *Webster's Dictionary*.

b. Problems of Belief: Many questions of vital importance are not subject to tests of facts or validity. Others may have factual bases, but their ultimate answers will depend not upon evidence, but belief. This belief may be generated from an analysis of the existing facts, or it may proceed from human desires, emotions, or intuitions.

In the first case, history and daily life provide myriad examples of beliefs based on factual analyses. The disquieting factor is that so many conflicting beliefs have arisen from different analyses of the same group of facts. The fundamental differences between Catholics and Protestants, between capitalists and Communists, between the French and the Germans have all arisen out of beliefs which are based on sharply differing interpretations of the same "facts." This class of problems of belief is an excellent one to submit for consideration of a competent group of conferees. Indeed, essential questions of religious and political doctrine, if not resolved by an absolute authority, are usually settled by conferences of the leaders concerned. The pages of history are rich—even bloody—with the accounts of such councils of church and state and the results they have had on Western civilization.

In religious questions, with due regard to the authority of Holy Writ

and traditional dogma, there usually are no facts, *in the scientific sense,* which can dictate an absolute solution. For this reason, conflicting beliefs may arise. Because each group is convinced that its deliberations are based on facts rather than interpretations, passionate espousal of the new belief often develops.

The belief that "A Federation of Western Europe Will Solve Many Economic Problems," while possibly true, is not capable of proof in advance, because there are no facts, no evidence, to support this. The belief may be founded on past records of economic advantages derived from other federations and from an imaginative prediction of what might happen in Western Europe, based on a study of the national characters and the agricultural and industrial potential. When such research and thoughtful interpretation have been carried on by a conference group to back up its decision to "believe," chances are that the belief *may* prove correct.

Likelihood that a belief which is purely the product of human desires, emotions, or intuitions will be sound are extremely slim. And, yet, many of the more eagerly propagandized beliefs or theories are based on nothing more solid than human greed and cupidity, blind fear of the unknown, or the celebrated "woman's intuition."

A throbbing and thriving vein of superstition runs through all of us, gorged with the dark blood of the Ur-religions, the pagan cults, the strange beliefs of the Middle Ages—influences buried so deeply that many people cannot really explain why they instinctively rap on wood, avoid black cats or mirror smashing. These questions of belief —emotional or "mystic," rather than rational—are outside the province of the problem-solving conference because they cannot be reached by the tools of interpretation, analogy, and prediction which make possible decisions in the first class of beliefs. Perhaps the medium's séance is the only conference group which can give them proper consideration.

c. Problems of Policy: Most conferences have to decide questions of policy rather than consider questions of fact or belief. In a highly organized society, action is the keynote, and many of the questions of fact and belief upon which necessary action may have to be predicated have already been "officially" settled. Essentially, the problem of policy is that of "*What* should be done?" "How can the Third Army capture the enemy's fortified position?" "Should Pontomobile make

only a two-door model next year?" "Will the school budget permit adoption of an evening school program?"

These questions of what is to be done may have strong relationships to questions of belief and fact, obviously, but when they are considered at a policy conference, the chief concerns are: (1) Suitability—will the proposed solution do the job? (2) Feasibility—do the means exist for using the solution? (3) Acceptability—will the solution please those who are troubled by the problem? Will it be well within the budget limitations?

To illustrate the application of these three tests, suppose that a school district has received many requests from parents and interested citizens for adult instruction in typing, crafts, social dancing, foreign languages, and science. A superintendent might suggest that they (1) take correspondence courses, (2) join the children's classes, or (3) attend an evening school. The first suggestion is plainly not *suitable,* for dancing, typing, crafts, and laboratory science cannot be most effectively studied by correspondence. This solution may be *feasible,* in that the State University may have such correspondence courses set up—many do—for people living in isolated regions. The solution, in terms of *acceptability,* is half-good, half-bad. It won't cost nearly as much as an evening school, but the students won't be as pleased with it, either.

The second suggestion, in most schools, would be unsuitable because schools are overcrowded already, without parents joining the classes as well. If certain changes in schedule or enlargements of classrooms were made, the suggestion might be feasible, but it would still fail of acceptability. Most parents would not want to compete with their children in school, and certain disadvantages might also accrue to the general level of instruction as a result.

The third suggestion, though obviously the most expensive, would probably be the most suitable, for the rooms would be empty in the evening, allowing ample room for all-adult classes. It would be the most feasible of the three in terms of space, equipment, and instructors. It would be most acceptable to the prospective students. If the budget will not permit evening operation, though, the students may have to accept the compromise of correspondence courses or daytime classes, if convenient. The job of the policy conference is to decide on possible courses of action, possible solutions, and choose the best in terms of the three criteria mentioned.

4. IDEATIONAL, OR "BRAINSTORMING," CONFERENCES: An interesting and useful form of group discussion that has become increasingly valuable to business and industry is the ideational, or "brainstorming," conference. The leader announces a topic for consideration, perhaps the improvement of automobile interiors. The job of the participants is to pour forth each and every idea for a proposed improvement as rapidly as they can. As ideas begin to flow rapidly, the group is interstimulated. A half-formed idea suggested by one member is completed by another. Improvements are made in existing ideas.

   The leader keeps the discussion moving, making sure everyone is contributing and ensuring that even the most ridiculous idea receives consideration, for it is often from the most far-fetched conceptions that the newest and most valuable gadgets may be derived. The goal here is not problem solving, training in method, or accumulating facts. The group is accumulating and refining ideas which may be all scrapped, all used, or adopted in part. Reports from the jungles of Madison Avenue indicate that this one unusual form of group discussion is fast becoming a standard procedure.

5. CONFERENCES WHICH ARE NOT CONFERENCES: In passing, it is necessary to refer some group meetings which are often labeled conferences, but which do not follow the rules. Many social or professional "conferences" are conferences in name only, because they violate the basic rules by (1) having audiences on many occasions, and (2) not being conference situations at all. The over-all purpose of a three-day "Conference of Implement Salesmen" or "Conference of High School Science Teachers" may be the group interchange of information and ideas, as in a good informational conference, but this interchange is accomplished less as group discussion than as passive classroom instruction.

   During such a three-day "conference," there will be an endless succession of formal speeches or lectures, often without even a forum or question period. Other treats will be panels and symposiums where most of the so-called conferees will sit helplessly and listen to the formal discussion. Frequently, the more enterprising conferees will not be found in the panel meetings, but in the nearest bar or out seeing the sights of the town. One reason for this defection, which may be considered a horrible crime if the school board or the company has paid the bill for the conferee, is that the conferee has really no

chance to confer, unless he gets together with some colleagues outside the regular "conference" meetings. For the rest of the time, the "conference" is run like a relentless machine, mowing down everything in its ponderous path.

An unfortunate experience of many novice conferees at these affairs is that even the committee work, which should at least have some element of informal discussion and cooperation, has already been masterminded by the chairmen and their supporters. The rest of the committee is not being asked to study and discuss the suggested program at all. They are being pressured into approving it without critical evaluation. Weak men, easily discouraged by such tactics, often throw up their hands in despair and vote "Aye."

Alert conferees will not allow high-pressure "managers" to manage a group discussion out from under them, however, and people are becoming increasingly aware of the dangers of conferences in which participation is stifled. As previously noted, it is best to call all such group meetings "workshops," "institutes," or "conventions," rather than "conferences," because they do not meet the basic requirements of a conference.

There is an even more insidious conference which is not a conference. This one has all the correct outward appearances. There is a leader; there are alert, prepared participants seated around a table, with plenty of pencils and paper. There is a topic for discussion. There is the agenda in front of the leader. The conferees have many interesting and useful ideas to offer. Only one little thing is amiss: The chairman has already solved the problem.

Why leaders insist on calling conferences, ostensibly to settle issues, when they have already "solved" them may be a puzzle to many, but not to the psychologist. When such a conference is held, a number of things may be supposed about the leader: (1) He has no real confidence in his own judgment and has called in his subordinates to back him up and flatter him. (2) He has made a decision on the basis of emotion or prejudice and now wants his intelligent and reasonable staff to "justify" it for him, by finding reasons—or excuses—why it should be done. (3) He has no confidence in his staff's ability to analyze and solve problems and will only let them play with problem-solving after he is finished with it. (4) He wants to play tyrant and bludgeon his subordinates into agreeing with him, making them play "rubber stamp" for fear of losing their jobs.

If the conference is a training situation, the above criteria do not necessarily apply, but if the conference is clearly planned to be a problem-solving session, and the solution is already made, then there is something seriously wrong with the leader, to say nothing of the kind of morale which must exist in his organization.

There is nothing wrong with the leader's making the decision. In most cases, when the praise or blame will fall upon his head, he should do so. But the whole object of the conference is to give him needed information and suggestions to arrive at the best solution *after the conference is over,* not before. He can, if he wishes, scrap everything the conference produced, though such procedure would indicate he has been unable to guide his subordinates into fruitful channels of discussion. He must, if he wishes to use conference technique effectively, give the conference and the conferees a chance to help him.

The appalled participant in such a renegade conference would be well advised, if he values his job, to speak when spoken to and "play ball," remembering that such conference leading may be the symptom of a mentally sick man. If this hapless participant wants to cure his ulcer and maintain his self-respect, however, he might start looking for a job under better-balanced leaders.

B. METHOD OF THE PROBLEM-SOLVING CONFERENCE: Without a pattern for discussion, the problem-solving conference might easily become an aimless talkfest. To give purpose and direction to problem-solving, many authorities have advocated adoption of John Dewey's five steps in reflective thinking: (1) awareness of a problem, (2) location and definition of the problem, (3) suggestion of solutions to the problem, (4) rational elaboration of the suggested solutions, and (5) testing of the solutions, leading to acceptance or rejection.[3] The similarity between this system and the "scientific method" of investigation can readily be seen.

In practice, Dewey's method is usually altered and even redefined. For conference use, this section will divide the problem-solving process into six steps. These steps are not absolutes, for they merge into one another during the discussion, and leaders may find it necessary, when on Step 5, to guide the discussion back to Step 3 for further clarification. Essentially, the steps will help to attack the problem systematically, by exposing the considerations which are usually vital to finding good solu-

[3] Adapted from John Dewey, *How We Think,* 2d. ed., D. C. Heath and Company, Boston, 1933, pp. 68–78.

tions. If a group can develop another procedural method which accomplishes the same ends with the same rational safeguards, then that method is probably as useful and valid as this. Owing to the complexity of some discussion topics, it may be necessary for a conference group to devote itself to separate meetings on each step, in order to digest and solve the entire problem. Rarely can a conference group find a good solution in an hour's meeting.

1. AWARENESS OF A PROBLEM TO BE SOLVED: This first step usually precedes the actual conference. If "all's well with the world," there is no apparent reason for calling a problem-solving conference. But when something is wrong with the morale of the troops, or classroom discipline has disintegrated, or the absentee rate on Assembly Line 5 has risen sharply in the last week, the people concerned become aware that a problem exists, though they are not certain just what that problem may be. The results can plainly be either seen or felt in the atmosphere. At this point, a problem-solving conference is indicated. In most business, professional, and military situations, a hierarchical organization of authority exists, which permits a senior executive or manager to convoke a conference to help him solve the problem. Here, there is no question of who will be leader. If, however, the people aware of the problem are all equals, it will be necessary for the group to make initial plans for the conference and democratically to select one of its number as conference leader. A group of taxpayers, farmers, fishermen, or parents might compose such a group.

   If a group of equally interested individuals has convoked the conference, they will all be aware that there is a problem to be solved, because there has usually been some discussion involved in convincing people that a conference is really necessary.

   With the management-generated conference, however, some of the members may not be aware that any problems exist. This means that the leader, in opening the meeting, should state the conditions which have led to the meeting: that something indeed is amiss; that it must be corrected if good morale, efficient production, or economy is to be achieved; and that the true cause of the present observed or intuited difficulty is not known. In effect, the leader is briefing the conference group. It is always good practice to make this initial statement, even if most members are already aware of the problem, to ensure that it is fresh in everyone's memory.

2. LOCATION AND DEFINITION OF PROBLEM: This step often merges with Step 1, because it leads so naturally out of it. When the group is aware, for instance, that a morale problem exists, they still have the task of pinning it down. What evidences have been produced in Step 1 to prove there is low morale? Taking these, the group can begin to define the problem in terms of kind, scope, seriousness. It is important that the problem be "located." If the morale difficulty has been noted only in Company K, this useful limitation will narrow down the possible causes to be considered in finding a solution. If *every* classroom in the school has a discipline problem, then the conference will have to look beyond the personality relationship between one teacher and one room of students for possible answers to the problem. If the absentee rate on the assembly line has been seriously affected only in the last week, there will be no need to study conditions six months past.

   Definition is also important, for the ability of a random group of men to have entirely different connotative meanings for words is notorious. The conference should agree, at the outset, just what they will mean when they refer to "morale," or what they understand by the term "discipline," or "high absentee rate." It may be that one teacher, for example, regards the "progressive teaching methods" of another as "complete absence of discipline," in which case the difference in ideas of discipline may actually be in kind, rather than degree. Conferences cannot discuss questions intelligently or effectively where these differences of definition exist. It is the leader's responsibility to ensure that the whole group is in agreement on a definition of the problem before any attempt at problem solving begins. This initial agreement will help build the spirit of cooperation, as well as aid in reaching solutions satisfying to the group.

3. EXAMINATION OF PROBLEM: This step grows out of Steps 1 and 2 and is a necessary prelude to the suggestion of solutions, even though not included in Dewey's list. *Location* and *definition* are preliminary steps, not intended as complete analyses of the problem. If the group attempts to cover too much too soon, the conference will bog down in a mire of statistics and opinions before a clear statement of the problem is made. When the problem has been given an accurate, descriptive statement and properly located, it follows naturally that it should be studied more fully.

   What is the history of the problem? What are the immediate effects

which can be seen? These have usually already been aired in Steps 1 and 2. What are the probable causes of the observed effects? This last group of questions is perhaps the most important, for, in finding causes, one also begins to see what needs correction or solution. This phase is, in essence, an informational conference. Without knowing the causes of the effects, conferees will be presenting solutions blindly.

If students are unruly, workers are absent, or troops have low morale, arbitrary measures to curb these defections may be introduced, but there is no guaranty that they are in any way related to a removal of the cause of the problems. If they are not designed to remove, correct, or alleviate the cause, then they may, and often do, make the problem even worse. If morale is low because the food is tasteless and insufficient, putting the troops on C-rations to "make them appreciate what they're getting now . . . and to teach them a lesson," will prove a dismal failure and result in much lower morale, with possible overt acts against the commanders. Good solutions come only from good analyses and understandings of the problems. So, the conference must spend some time on Step 3 to ensure that a thorough, accurate analysis has been made.

4. DISCOVERY OF POSSIBLE SOLUTIONS: When causes are known or suspected, it becomes possible for the conferees to suggest solutions to the problems. In Step 4, the participants are engaging in something similar to ideation, or brainstorming. Now is the time to consider every possible solution. Everyone is encouraged to contribute ideas and to enlarge upon the suggestions of others. The more enthusiastic and active this period of discussion can be made, the more possibilities for solution will result.

Occasionally, when a group is not properly stimulated to discover answers to the problem, insufficient or inadequate solutions will be presented, thus hampering the eventual conclusions of the conference. At this stage, no suggestion should be rejected as unworkable or trivial, for the atmosphere of selection and rejection may dampen the enthusiasm of participants who are afraid their ideas will be laughed at or scorned. To raise morale, for instance, such diverse suggestions as "have a mascot," "more time off," "harder work," "more restrictions," or "more USO shows" might be presented. The leader will strive to keep the ideas steadily flowing from all members of the conference. Either he or an assistant will record all suggestions so they will not be forgotten in the next phase.

5. ESTABLISHMENT OF CRITERIA FOR TESTING SOLUTIONS: Some conference groups prefer to establish criteria for a good solution after the problem has been located and defined. In some circumstances, this may be most useful in saving time, but it can also be psychologically harmful, in that each participant will have to test his suggestions mentally before offering them. Thinking his idea does not meet the criteria, a conferee may suppress what might be an excellent solution, given some modifications. In many cases, it is better to encourage the free flow of ideas, stimulated by an awareness of the nature of the problem, which itself has already indicated some general though undefined criteria. When this wealth of suggestion is compiled, then the conferees can begin to sift it, judging each suggestion in terms of *suitability, feasibility,* and *acceptability,* until they have narrowed the field down to the best possible solutions. In this process of elimination, good suggestions will be made better with elaborations, alterations, or subtractions which reflect the demands of the criteria.

   If it is believed, for instance, that lack of classroom discipline is the result of the students' having no sense of obligation to fellow students, to the teacher, or to the tax-paying parents, who pay for their free education, the best solutions will be those which will really make students aware of the obligation they have; those which also can be applied, given the space, time, human and monetary limitations of the school; and those which can, in addition, be made acceptable to teachers, students, and parents. Stern lectures or locking the students in the classrooms might be thought to ensure improved discipline, but obviously such solutions will not meet all the criteria, particularly that of acceptability.

6. CHOOSING THE BEST SOLUTION: The difficult work of the conference is over. After application of criteria and elaboration of possible solutions, there remains the selection of the one felt to be *best.* There may be a unanimous decision, but that is not necessary. Often, in a democracy, opinion may, understandably, diverge on what are the best ways to do things. In the conference, the leader will apply the principle of the majority rule, seeking to effect compromise with the minority or minorities by moderating or broadening the accepted solution. Compromise, after all, is the essence of such conferences, whether they be wage-mediation boards, PTA meetings, management sessions, or staff conferences.

C. PUTTING THE SOLUTION TO WORK: Technically, the conference has finished its work with Step 6. Actually, however, choosing the best solution or making a decision on fact, belief, or policy does not mean much alone, unless it is applied. Frequently, good solutions have the means for their use contained in their final statement. When the conference members consider the criteria of suitability, feasibility, and acceptability, most of the practical problems concerned with putting a solution to work have to be met.

If the group has merely selected a solution to the problem, however, and has made no provisions for using it, the conference may have to continue its deliberations until a satisfactory mode of application can be found. It is one thing to agree that better food in the mess halls will raise morale, and quite another to devise a system for *getting* better food in the mess halls. Some experts believe that the problem of application of the solution should be the final step in the problem-solving method, insisting that the problem is not really solved until the solution is satisfactorily applied. This view is not without merit, but often, in complex problems, finding effective modes of application will require separate problem-solving conferences.

These considerations indicate that involved problems may have to be treated by series of conferences: a master conference or conferences to isolate main issues, subordinate conferences to find solutions to major problems, additional minor conferences to find ways to apply the solutions to the problems.

It is the conference leader's responsibility to make the basic analysis which will determine how many and what kind of conferences will have to be held in order to remove the problem, though conference members may also indicate the need for further conference meetings.

D. LIMITATIONS AND CONTROLS ON CONFERENCES: Despite the carefully-thought-out conference method, the criteria for choosing good solutions, and the announced aim of informal group discussion, conferences often fall short of their goals, becoming "conferences which are not conferences." Several types of these offenders are mentioned in this section in relation to the psychological drives of the conference leaders. The leader, upon whom so much of the responsibility for a successful conference rests, must also ensure that the conference does not become a travesty. If the leader has already made up his mind or found a "solution," there is no defensible reason for calling a conference.

He may call a meeting and brief his men on his decision, but that is in no sense a conference. If the leader intends to make his own decision on a problem, then he is also wasting his staff's time by calling them in to choose a solution he may discard.

It is possible that the leader *must* make the final decision, because he alone will have to bear the blame, if anything goes wrong. In such cases, the leader is perfectly justified in *limiting* the scope of the conference. Conference limitation means nothing more than discussing only those matters which come under the problem-solving steps on which group opinion or thinking is needed. When the leader knows he must make the choice of the best solution, he will do well to tell his conference group so: "Gentlemen, I must make the final decision, for I, alone, am responsible for the action to be taken. I do want the benefit of your particular knowledge of the problem, your good suggestions, and your nominations for satisfactory solutions. From this conference material I will be able to make a sounder, wiser decision."

This limitation helps the group rather than hinders, for it gives them a clear idea of what their function is to be in solving the problem. They are advisory in nature.

In another situation, the problem may already have been located and defined, perhaps by the Pentagon, by the Industrial Board, by the National Association. Here, the limitation is on the other end. There is no need for the conference members to duplicate what has already been done, unless it is feared that the original analysis is faulty. And such fears are not always regarded as loyal in large organizations.

Conferences may also be convened to discuss only one step of the problem-solving method in relation to the problem. Perhaps the leader is not yet prepared to begin sketching solutions to the problem himself, so he will call a conference limited to Step 3, Examination of the Problem. This conference will be largely informational in nature, but what the leader learns from an airing of the effects, causes, and background of the problem, as seen by the participants, may do much to help him get a clearer understanding of a problem he must solve alone.

The conference participants have the right to know exactly what is expected of the conference and of them. There are few things more disappointing than to work hard to find a good solution and discover two days later that the leader has chosen, instead, a pet plan of his own which is not nearly so good as that worked out by reasoning and compromise in conference. It is also an ulcer-producing experience to attend a conference

when the leader has *already* made up his mind and is now only trying to "catch" people who disagree with him. Such conferences require mind readers, rather than conferees.

With the limitations, which are external or outside the actual conference, come also some controls to guide the progress of the conference itself to ensure that it reaches its goal and preserves the true quality of a group discussion. These controls are nothing more than *questions,* but they are cleverly designed questions which help the leader to guide the discussion, possibly even to help shape the group's thinking, without such control being obvious.

The conference opens, as previously noted, with an introduction by the leader. Here, he announces the limitations of the conference and its ultimate goals. He may introduce the conferees, if they are not mutually acquainted, indicating their qualifications to participate. Then he will give an oral briefing of the problem, possibly supplying here Step 1, or "Awareness of Problem." He may go even farther and "Locate and Define the Problem" for the group. Out of his location and definition may arise some difference of opinion. This is good and it is a sign of a healthy conference, for it shows that all the minds are not running in the same channel or rut. From this time on, the conference should be nothing more than informal group discussion, guided toward solution of the problem —or toward whatever limit the leader or group has arbitrarily imposed. The leader can no longer give his opinions; he cannot scold or correct members; he cannot squelch discussion.

In theory, the leader can do none of these things. Plainly, they would tend to destroy the informal group atmosphere. But frequently it is necessary for the leader to make his or other persons' opinions known, as well as facts which the group needs for complete examination of the problem. There are moments when a member may need reproval or correction, and there are certainly times when some discussions, though spirited and interesting, have nothing to do with the problem at issue. Here, the leader retains both the informality of the conversation and his own control of the group with shrewd use of questions.

Three main types of questions, classified according to the person or persons addressed, are as follows: (1) *The overhead question.* Here, the leader phrases a general question which is directed to the entire group. Questions to open discussion or to move to new topics are often of this kind. (2) *The direct question.* This question is the opposite of the overhead question. It is directed to a specific person. (3) *The reverse or relay*

question. When a conferee is trying to bait the leader into an argument or damaging expression of opinion, this question bounces it right back to him or passes it on to another. The chairman knows he must not get involved in the discussion if he is to retain his role of impartial moderator. If a participant asks him where he stands on organized labor, he might well ask the conferee what *his* position is. Some awkward questions can be passed along to members of the group for answer. If the leader is asked whether the corporation *really* has the workers' interest at heart, he might well ask an official of the Comptroller's Division to answer the question, "Mr. Morgan, what would *you* say to that question?" This takes the pressure off him and returns it to the group, where it belongs.

It has been said that the heart of group discussion is the question, for it enables the leader to lead without dictating. The three kinds of questions mentioned above can be used for a variety of purposes. Just a few of these are (1) to open discussion, (2) to stimulate interest, (3) to provoke thinking, (4) to gain information, (5) to verify facts, (6) to check participant knowledge, (7) to distribute discussion, (8) to break up side discussions, (9) to put a troublemaker on the spot, (10) to develop a subject, (11) to draw shy members into the discussion, (12) to get a variety of opinions, (13) to change trends of discussion, (14) to request further explanation, (15) to arrive at conclusions, and (16) to limit or end discussions.

If the leader holds a point of view which he feels should be expressed, but which has not been suggested by any of the participants, he may phrase it as a question, "Do you know that some people believe our taxes can be cut without hurting the defense program?" This introduces the idea to the group. What they may think of it is another matter. At least, the leader has given the idea an airing.

If a member has referred to the proposal of another in unflattering or even vulgar terms, the leader, rather than scold, may ask, "Can you rephrase your objections in a friendly manner, Mr. Williams?"

The question can take the place of many positive or negative statements which might offend the participants. And it will usually get a better reaction from the group, for it is only a tentative suggestion, not an order, a command, or a request. It helps to remind them, however, of the basic purpose of the conference, the method being used, the questions under consideration, and the fundamentals of courtesy in group discussion.

In gaining information needed for effective problem solving, the leader may use questions to increase group knowledge; he may request statistics,

illustrations, examples or case studies, dates, descriptions, definitions, classifications, comparisons, criticisms, verifications, outlines or summaries, interpretations, and justifications. A question on any of these topics can produce material which can be the nucleus of a lively discussion.

E. THE CONFERENCE LEADER: Previous sections have shown that the leader has more responsibility than others for the planning and success of the conference and, yet, less actual "say" in the discussion and solution of the problem. This is not an accident. The leader is a monitor, not a mentor. He must act as a friendly, impartial, alert, interested referee. To achieve these ideal goals, he should be personable, sincere, patient, fairminded, courteous, a good listener, and endowed with a sense of humor. The man who combines these virtues is not common. The man who has most of them, some of them, or none of them, will want to acquire the ones he lacks, if he is to get the most from conference leading. The same might be said of his performance in other business and social activities as well.

Because the leader must anticipate so many things, both before and during the conference, it will be useful to classify and list the various steps to be remembered when you are to lead a conference.

1. CONFERENCE PREPARATION

a. Mental Preparation

(1) Study the problem carefully. Locate and define it for yourself. Follow the problem-solving method to see how the discussion might develop.

(2) Plan an opening briefing. Show the group why the problem is important. Give them needed information, definitions, and limitations. "Sell" the problem to the participants.

(3) Draw up the agenda. From your own analysis, you will have an idea of how the discussion might develop. You will also have some possible solutions in mind. These will aid you in making a tentative pattern. Of course, you should not bend the conference to your outline. Let the subject develop as interest seems to lead it, but have the outline handy, in case discussion or interest flags or runs aground on a knotty point.

(4) Prepare conference questions. Referring to your agenda-outline,

FIGURE 4–2. Members of a military conference are briefed before they discuss the possible solutions of a problem. Skillful use of audio-visual aids and briefing techniques is frequently essential to successful conferences. Conferees must be well informed before they can make decisions. Note the attention which has been paid to good lighting, comfortable seating, sturdy visual aids, and pleasant atmosphere. (Official U.S. Air Force photo.)

phrase typical questions to open discussions, change trends of talk, bring out little-known facts, secure summaries.

(5) Make a timetable. Budget the items on the agenda so the group will be able to have ample discussion time and yet finish its job. The timetable is only a guide, for problems may develop which will necessitate an entirely new schedule, perhaps even more conferences.

(6) Plan for frequent summaries. The more complex a problem is, the more often you will want to pause in the discussion to review and summarize what has been said and done. This helps everyone to "keep in step" and may clarify statements or ideas which have confused. Study of your agenda will indicate possible spots at which a summary would be welcomed. A final summary is mandatory so that the results of the conference can be crystallized. These statements are the only ones which need not be cast in question form, but even they can be introduced this way: "Am I correct in assuming that we agree that. . . ."

(7) Select needed aids. Decide what audio-visual aids, additional facts, consultants, or reports are needed to increase group understanding and interest. Obtain them well in advance.

(8) Decide who the participants shall be. Study the possible contributions and personalities of each member. Be prepared to help them give their best.

b. Physical Preparations

(1) Set a definite date, time, and place for the conference.

(2) Notify the participants of *all* particulars, so they can prepare themselves. If short briefings may be desired from some specialists in the group, indicate what information may be needed.

(3) Obtain a satisfactory room. It should be large enough for the group, but not so large they feel lost in it. It should be quiet, clean, well-lit, heated, and ventilated.

(4) Make certain a satisfactory conference table is available. To encourage informal group discussion, a round table or a rectangular table which permits all members to see each other easily is best. Long, narrow tables make personal conversational relations impossible, except for the lucky few in the middle. Such a table also tends to turn the leader into a "king," sitting in splendor at the far end. Avoid it.

(5) Obtain chairs which are not uncomfortable but which are also not too comfortable. If anyone will have to rise to use visual aids, the chairs should be light enough to move easily. Arrange seating so

members will not have distracting outdoor views or indoor poster displays to fight for their attention.

(6) Provide extras—ashtrays, water and glasses, sharpened pencils and scratch pads, racks for coats and hats, and name plates—if needed.

(7) Set up audio-visual aids so they can be readily used. Test projection equipment. See that chalkboards are clean, with a good supply of chalk and erasers. Check to see that easels and other display aids for maps or charts are placed so they can be seen by all. The group should be seated and aids should be so disposed that no light-glare impedes visibility.

(8) Make sure that you look your best, conservatively dressed. Careless or casual clothes may set the tone for a careless and casual conference. Most conferences, despite the encouraged informality of conversation, are serious business. A neat, personable leader, who is also well prepared mentally, can inspire the conference group to a similar standard of excellence.

2. CONFERENCE PROCEDURE

a. Leadership Qualities

(1) Speaking Qualities: Be sincere and natural. Don't strain your voice, but be certain it can be clearly heard by all. Use pauses, tempo variations, and emphasis to stress meanings. Work for variation in tempo, energy, and pitch, to prevent boring speech patterns. Speak to the group, not to individuals.

(2) Personal Qualities: Be relaxed, poised, yet alert and sure of yourself. Show enthusiasm, energy, and humor. Be both friendly and courteous to members. Don't engage in arguments or temperamental exchanges, even if aggravated. Remember, that is probably just what the other person wants you to do, in order to make you destroy your control as leader. Be quick to grasp new ideas and trends, developing ideas which may otherwise be lost. Draw out the shy, uncommunicative member. Congratulate the frequent contributor, but hold him back to give the others a chance. By your personality and your obvious interest and preparation, be a real leader for the group.

b. Conducting the Meeting

(1) Begin the meeting on time. If there are latecomers, let them feel they missed something really important. They are at fault, not you.

(2) Introduce yourself, the conference members, *and* the subject for discussion. Make sure the group knows what the meeting is about, capture their interest, and show them that a real problem exists which you hope they can solve.

(3) Don't be a slave to your notes. Use them only for reference. If you use audio-visual aids, have the use of them rehearsed and your commentaries prepared so that time and effect will not be lost.

(4) Begin with a question. When you have briefed the group and called for any informational briefings members of the conference may have to offer, start the discussion with a well-phrased overhead question.

(5) Develop the problem. Follow the agenda and the timetable, with wise use of questioning.

(6) Keep discussion flexible. If the group desires to change the agenda, make necessary changes in the interest of cooperation and better solutions. Remember, the agenda is a temporary guide and reflects the thinking of only one man. It could be inadequate.

(7) Distribute discussion evenly with questions. Use them to check side discussions, inattention, arguments, and attacks on personalities.

(8) Make frequent summaries as needed to ensure that the group understands what has been said and how the discussion is developing. Avoid pretentious or vulgar language. They are both offensive. Avoid clichés and tiresome repetition of trite words and phrases.

(9) Introduce case studies, visual material, or other aids where necessary.

(10) Keep discussion lively . . . and moving.

(11) Note important points and steps in the discussion on paper or on the chalkboard. This is called *recording.* It gives you a ready reference for your summaries and your conclusions. In some important conferences, the leader may have a helper, or "recorder," who will keep a log on the board or on easily read charts so that the conference members can follow the progress of their discussion without such frequent summaries by the leader. This method also tends to reduce the repetition of points or arguments already considered.

(12) In recording or summarizing, make sure that the group agrees with your statement of the points or results.

(13) See that the group is free from any exterior distractions during the conference.

(14) Provide smooth transitions from one step to the next, from one point to another.

(15) Be sure each section has ample discussion time.

(16) Keep the group aware of the goal of the conference.

(17) Seek group agreement and compromise in selecting a final solution.

(18) In the concluding summary, impartially present results, thanking members for their participation.

F. THE CONFERENCE PARTICIPANT: Previous discussion indicates that the lion's share of responsibility for the success of the conference goes to the leader. The best leader cannot have a successful conference unless the conferees take some responsibility on themselves. The conferee has much less to worry about than the leader, but that does not absolve him from making preparation.

1. CONFERENCE PREPARATION

a. Become familiar with the problem. When you have been invited to participate in a conference, be sure you know what is to be discussed so you can study the background of the problem. Even if the leader has not indicated that your special knowledge or experience will be useful, if you have some, get it ready. It may prove invaluable.

b. Make your own trial agenda. Think the problem through for yourself, just as the leader is doing. This will help you flex your brain in thinking about the problem. It may open new avenues of preconference investigation.

c. Prepare case studies, statistics, illustrations, visual aids, which may prove useful in making points or contributing to group knowledge. There may not be time for them, but often such forethought will be blessed by leader and fellow conferee alike.

d. Know date, time, and place. Make sure you know all the necessary physical details of the conference.

e. Keep an open mind. Just because you have studied and thought the problem over, don't believe that all *your* ideas are perfect, just because they are yours.

f. Look your best. Somebody who looks worn-out and poorly groomed is usually not a stimulating conference member. Remember that many people who cannot see your fine inner qualities will be judging you by the externals they *can* see.

2. CONFERENCE PARTICIPATION

a. Listen carefully to what is being said. Many misunderstandings or repetitions in conferences are caused by members who do not listen carefully to what others are saying.

b. Have the right attitude toward the conference. Be interested in helping the *group* to solve the problem. Don't let your preparation lead you to believe you have already solved the problem for all time.

c. Be interested in developing the discussion. Give credit where credit is due when an admirable idea is expressed. Enlarge upon or correct material which may profit by it.

d. Participate actively, but do not monopolize the discussion. Do not hang back because you are afraid the rest will laugh at you, either.

e. Emulate the speaker's qualities in voice usage and personality, as outlined in E.

f. Think before you speak. Don't waste the group's time while you

hold the floor, trying to find ideas or words to fit your nebulous thoughts.

g. Say what you mean, when you do speak. Avoid ambiguous terms or "loaded," prejudiced words.

h. Contribute your informational aids, if any, when the need appears.

i. Be willing to see other people's points of view, even if you feel committed to a different opinion. Ideally, you should not be indissolubly tied to any idea, for you want to be free to accept better ideas and evaluations when they appear.

j. Be courteous. Avoid arguments over issues or personalities.

k. Be honest, sincere. Don't allow the group or the leader to pressure you into approving something you *know* or passionately *believe* to be wrong. Stand upon your knowledge, experience, and beliefs, but do not give unnecessary offense by denouncing the others. They may be standing on their experience and beliefs also.

l. Take notes on the conference. This will be essential if there is no recorder. You may want to check the accuracy of the leader's summaries, or you may want to challenge the exact wording of a conferee's statement.

m. Express your pleasure at being included. At the conclusion, if the opportunity presents itself, thank the leader for asking you to participate. He has shown that he values your education, experience, and thinking by having you join the group. Let your fellow conferees know that you enjoyed the group experience in problem solving. If any heated exchanges occurred during the discussion, this might be a good time to repair the damage done to personal feelings. Take the initiative, even if you were the offended, not the offender.

G. USE OF AUDIO-VISUAL AIDS AND BRIEFINGS: The first three sections of this book have treated aspects of speaking and composition which are essential to successful conferences, though they are not dominant aspects. The basic rules of speech composition and delivery apply to both leader and conferee during preparation and participation in the conference. Leaders who do not organize their ideas effectively, chairmen who put conferees to sleep with their monotonous voices, conferees who mumble so badly they cannot be heard, members who can

never find the right words to express their ideas, all these people need to review the fundamentals of speech.

The discussion of audio-visual aids offers many suggestions for use in speech situations. Ingenuity on the part of the leader or the conferee will permit adaptation for conference situations so that both interest and understanding can be greatly increased. *Recording* the progress of the discussion is, in itself, a form of visual aid.

Briefings are most often used by conference leaders, as introductory presentations of the problems and their backgrounds, or as the intermittent and final summaries to the conference. The ability to brief material from both written and oral sources on the spot will prove an invaluable skill to the men who must frequently lead conferences. Participants will also find training in written and oral briefing an advantage both in preparation and in discussion.

H. SOURCES OF DIFFICULTY IN CONFERENCES

1. PERSONALITY PROBLEMS

a. Leaders: Some conference leaders leave much to be desired, both as leaders of conferences and leaders of men. A few reasons for their shortcomings as conference leaders have already been discussed. The important thing for a conferee to remember when he is attending such a man's conference is where his "enlightened self-interest" lies. If the conferee's continued well-being, salary, or position depends on pleasing the leader, then unless he wants to be a martyr, he can hardly afford to antagonize him. If the conferee has nothing to fear from the leader, then within the bounds of courtesy, he might oppose the dictatorial leader, particularly if he sees that the rest of the group is afraid to engage in a real, honest discussion.

It is all very noble to stand up for truth and goodness and beauty, but the bitter realities of man's world do not always permit this luxury to wage-earners with families. Literature and history are gorged with tales of men who destroyed themselves or who were destroyed because they were *sure* they were right and the rest of the world was wrong. Unless the unfortunate conferee wants to emulate Antigone, Joan of Arc, and Savonarola, he will do well to follow the conference principle of "compromise" and hope that time will replace the leader.

Nothing will be gained in any conference by bitter wrangling. If the leader appears to be a tyrant, the conferee should with *subtlety* urge

his points or his reservations to the leader's view. If he cannot agree, he can be silent or noncommittal and still save his self-respect. Perhaps it is odd that men, willing to die in battle for an abstract idea called "Liberty," will find themselves denying their principles or keeping silent in anything as innocent as a conference, but the competitive nature of business and the professions, coupled with the mass desire for personal and familial *security,* makes mice of many men. Fear of losing job, promotion, raise, favor, or efficiency report may all be potent deterrents to forthright discussion. Leaders should avoid such conference atmospheres.

b. Conferees: Both leaders and conferees will find that a typical discussion group may include some of the following individuals: (1) the excessively shy, (2) the loudmouth, (3) the "wit," (4) the expert, who knows everything, (5) the marathon talker, (6) the "fogbound" thinker, who can never quite get his ideas clearly expressed, (7) the fighter, who is ready to hit anyone who disagrees with him, (8) the debater, who will oppose anybody just for the sake of argument, (9) the persecuted, who always feels the world is picking on him or groups he represents, (10) the idealist, who is unwilling to make the simplest compromise in the interest of a satisfactory solution, (11) the listener, who sits and nods agreement but never contributes, (12) the hitchhiker, who rides on the ideas and opinions of others, (13) the orator, who can't say anything in plain words but needs flowery phrases even in asking for the ash tray.

The leader has an advantage over the good-natured conferee in dealing with any of these types, for he can draw out the shy, silence the talkative, and reprove the impudent by using an appropriate question. If someone makes a verbal attack on him, he can use the reverse or relay question and pass it back or on. The conferee cannot get out of difficulties that easily. He will have to rely on his patience, humor, and courtesy to deal with the types just described.

2. PROBLEMS IN DISCUSSION

a. Facts and Evidence:[4] Either willfully or through ignorance, conferees and leaders may present erroneous, or misleading, materials in support of an analysis or a solution. A leader might, without knowing the true facts, present a background analysis of a problem, causing the

[4] See also Monroe C. Beardsley, *Practical Logic,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1950; Edwin L. Clarke, *The Art of Straight Thinking,* Appleton-Century-Crofts, Inc., New York, 1929; and Eubank and Auer, *op. cit.*

conferees to misinterpret the nature of the problem and choose incorrect and useless solutions. A conferee might deliberately introduce false "evidence," designed to trick the conferees into making a faulty decision.

To avoid such pitfalls, conferees can apply the four basic tests for evidence.[5]

(1) Are sufficient facts present to make interpretations or decisions?

(2) Are the facts consistent with each other, or are there unexplained contradictions?

(3) Are the facts consistent with the test of causation? Could they have resulted from the supposed cause or causes?

(4) Are the facts stated clearly and concretely, or are they vague, uncertain, couched in abstract terms?

Tests for the *source* of the evidence may also be applied:

(1) Was the authority or witness *competent* as an observer of the fact?

(2) Was the authority *competent* to observe and report the fact *accurately at the time?*

(3) Was the authority *in a position to observe* the fact?

(4) Was the authority *prejudiced?*

(5) Did the authority have *special knowledge?* Is he an expert?

(6) Was the authority *intellectually honest?*

(7) Was the authority *definite?*

(8) Was the authority *primary* rather than secondary?

(9) Was the authority *supported* by other authorities?

(10) Will the group *accept* the authority?—with an American group, for example, the United States Secretary of State will be more acceptable or believable than the editor of *Pravda.*

In the presentation of evidence or interpretation of facts, the desires and prejudices of conferees may cause them to warp and distort

[5] Based on tests for evidence in Eubank and Auer, *op. cit.*, pp. 129–132, and in Clarke, *op. cit.*, pp. 108–123, 142–143.

unconsciously or deliberately. Whether the error is unintentional or calculated to mislead is not so important as the fact that erroneous evidence has been introduced into the discussion. Conferees and leader must be on guard against such material so that it may be either corrected or discredited. If the person who offered the offending evidence or opinion was not aware of the true nature of his material, he will probably profit from a polite reevaluation of it. Many people do not realize to what extent desire and prejudice play tricks on the subconscious. If a conferee discovers that he has a previously unrecognized bias, he may be able to think more clearly once he is aware of it.

If the conferee has deliberately introduced false or misleading information, it is well to expose it for what it is, both to prevent misconceptions in the minds of other conferees and to warn the culprit that his reputation will suffer with the group if he persists in such deceits.

b. Rationalization: It has been said that most of man's "thinking" is really only rationalization. While the term may have a favorable connotation to some, who assume that its root word, "rational," implies logical, ordered thought, as opposed to emotional, prejudiced judgments, that is not the common usage. Rationalization, as generally used, means that curious process of defensive argument by which men seek to find good, logical reasons for acting or believing as their inner desires and prejudices dictate. Much of this type of argument is offered "after the fact."

A woman, for instance, may feel depressed, frustrated, with conditions at home. While shopping, she decides to try on some hats "just for fun." Finally, she purchases a hat, possibly unbecoming, which she really can't afford. The "splurge" has made her temporarily forget her troubles, but when she returns home, she realizes that the unnecessary, wasteful expense may add to the family difficulties. Then rationalization begins to work. She tries to find all the valid reasons for purchasing the hat, to avert the certain anger of her husband. A typical list might run like this:

(1) My old hats are all shabby and faded.

(2) I needed a new hat for Easter.

(3) You don't want your wife looking like an old frump, do you?

(4) It was a real bargain—marked down from $50 to $38.

(5) I never get to spend any money on myself.

(6) It was raining—I needed something to cover my head.

(7) You don't love me any more.

To those who say, "That's just like a woman," it is necessary to say that it is also just like a man, but most men don't want to admit such a weakness. How often do men make investments or purchases, decisions or friendships, which are based almost entirely on a "hunch" or some similar emotional stimulus? If all turns out satisfactorily, they will congratulate themselves on their "shrewd business sense and understanding of human nature." If the outcome is financially embarrassing or personally humiliating, it becomes necessary to put rationalization to work to find "reasons" for having made the mistake in judgment. Apparently, the premise behind such activity is that anyone can forgive a mistake that is the result of logic, but no one can overlook an error resulting from emotional stimuli. Probably, though, human beings are more quick to pardon the rashness of emotion than the mistakes of logic. This is food for thought.

Conferences will have to deal with both rationalization of *past* events and actions and rationalization of *proposed* plans and beliefs. Obviously, it is easier to find the true motives behind what is past—simply by applying the various tests given in this section—than to uncover the actual impetus for group proposals for future action. Desires or hatreds may urge men to adopt an unwise or unfair solution, but their rationalizing apparatus, perfected by long use, will help them to find "valid reasons" which have at least the *appearance* of honesty, sincerity, and sound thinking. Leader and conferees should always be on guard to ensure that their problem solving does not break down into an exercise in rationalization.

c. Mechanical Errors in Logic: Though the rationalizer may, with luck, find perfectly sound reasons for doing what he wanted to do—and would probably do again, with or without good reasons—more often he finds, and takes advantage of, loopholes in logic that appear to be valid reasoning but actually are not. In both the inductive and the deductive methods of reasoning, there are a number of opportunities for "mechanical" failure in the reasoning.

(1) Errors of Induction: The inductive method of reasoning requires that a sufficient number of specific examples be gathered in order

that a generalization may be made about the entire class. If a psychological tester discovers that 98 per cent of the students in Woodrow Wilson High School can play a musical instrument, he can generalize that these high school students have musical talent and training. An inductive reasoner moves always from the particular to the generality. For that reason, it is the method of reasoning most frequently used by the statistician, the laboratory scientist, or the psychologist. They must study objects, people, phenomena, or materials in order to make adequate generalizations. In a sense, a conference does this, too. The study of the problem contains the particulars; the solution is based on the generalizations which result.

Among the chief sources of error in inductive reasoning are—

(a) Hasty Generalization: Without examining sufficient cases, the speaker states a general rule. He either does not have enough conclusive evidence, or he may be trying to base a generalization on only one or two cases. "I've been gypped twice on used cars. You just can't trust auto dealers."

(b) Biased Evidence: The speaker makes a generalization based only on the cases that prove his point. He either deliberately or accidentally, through prejudice, ignores important instances which prove otherwise.

(c) Misinterpretation of Evidence: With perfectly good statistics, the speaker may try to draw a generalization that is completely unjustified. It may be irrelevant or simply the result of misreading the evidence. If a series of reports show that Nebraska is far ahead of Texas in production of cereal grains, the speaker might say that Nebraska is more active as a farming state than Texas. Unfortunately, these accurate statistics do not include the tremendous contributions of Texas in other farm and ranch products.

(d) False Cause and Effect: As previously explained, this fallacy results from assuming a relation where none exists. With induction, one could make such a mistake by counting the number of times gongs clang and sirens whine when there is a big city fire. Since gongs and sirens are always heard, the generalization could be made that the sound of gongs and sirens means a fire. "It ain't

necessarily so." The noises could also be ambulances speeding to the hospital.

(e) Mistaking Hypothesis for a Proved Rule: From a preliminary observation of a problem, a scientist usually makes an hypothesis, which is an attempt to explain effects in terms of causes. This is only a *theory.* By using scientific method, the scientist rigorously tests the theory to see if it is valid. If it is not, he abandons it. Even if it seems plausible he cannot rule out possibilities of other, better explanations. The hypothesis is a *point of departure* in reasoning, not the *port of arrival,* yet many people will cite unproved theories as valid evidence.

(2) Errors of Deduction: While induction moves from many particulars to a generalization, deduction moves from a generalization or proposition to a particular or specific statement. If the inductive process has shown that Woodrow Wilson High School students have musical talent, a deductive argument, using the general proposition might attempt to show that Sally Simpkins, who is a student at Woodrow Wilson, also has musical talent. There are ample opportunities for creating fallacies, because the general statement or major premise must be absolutely true of *all* or of *none* of the group being described. No necessarily valid conclusions can be made on the basis of a statement that it is true in "most cases" or is "relatively" true. Therefore, generalizations achieved by induction make risky major premises, because they are so *seldom* true of *all* cases.

Volumes have been written on the subject, but this section will do no more than indicate some basic trouble spots in deduction. The classic syllogism—the form in which deductive reasoning is set up—is:

All men are mortal. *(Major Premise)*
Socrates is a man. *(Minor Premise)*
(Therefore) Socrates is a mortal. *(Conclusion)*

The major premise states that something is true of an entire class of beings. The minor premise places Socrates in that class of beings. The conclusion obviously follows: if Socrates is a member of the class, what is true of the entire group must certainly be true of him.

(a) If the basic syllogism is altered slightly, however, this will be the result:

All men are mortal.
Socrates is a mortal.
Socrates is a man.

If Socrates is a man, then the conclusion is correct, but it does not logically follow. Actually, the Socrates referred to here is a cocker spaniel, and he is mortal. But he is not a man, so no reasoning may be done in terms of the major premise. To avoid this error, always check to make sure that the minor premise contains the *first* term of the major—in this case "men"—as its *second* term. Otherwise, the reasoning will always be fallacious. The conclusion may, by chance, be correct in terms of what exists in the real world, but it will not be logically correct. Another example is:

Wise people read good books.
We read good books.
We are wise people.

It may be so. And it may not be so. Possibly many people who read good books are not wise people. Reading good books is not the only path to wisdom. To be correct, the syllogism should read:

Wise people read good books.
We are wise people.
We read good books.

A more ridiculous example of the fallacy is this:

All parakeets have feathers.
This buzzard has feathers.
This buzzard is a parakeet.

(b) Alter the "Socrates" syllogism again, in a different way:

All men are mortals.
Socrates is not a man.
Socrates is not a mortal.

Because Socrates is a cocker spaniel, and all living things are

mortal, by definition, the reasoning is clearly false. The mistake is in beginning with a positive major premise and inserting a negative in the minor premise. No reasoning can be done in such a situation. The minor plainly shows that its subject has no relation to the major, and therefore, no correct conclusions can be drawn from it.

Again:

All parakeets have feathers.
This buzzard is not a parakeet.
This buzzard has no feathers.

(c) The previous example shows what difficulty the presence of a simple negative can make in the minor premise. Here is a more complex fallacy resulting from use of a negative:

No man can serve two masters.
Socrates is no man.
Socrates can serve two masters.

"No man," in the major premise, means "not any" or "none." "No man," in the minor premise, means "not a man, but some other kind of being or object." Though the English words are the same, the *meaning* is quite different. To avoid this sort of "logical" nonsense, the minor premise should be positively stated:

No man can serve two masters.
Socrates is a man.
Socrates cannot serve two masters.

(d) Another problem in the mechanics of words is a frequent source of difficulty in major premises:

All Americans do not go to Europe.

Casual readers will usually get the correct idea, "Some Americans go to Europe; some do not." More careful study would seem to indicate, however, that the sentence really means that the entire American population does not at any time take trips to Europe. This structural stumbling block can be avoided only with "Some Americans go to Europe." But "some" is not a universal term, and satisfactory conclusions cannot be drawn from it.

(e) In a major premise, use of the word "some" will not yield reliable results:

> Some soldiers are cowards.
> Lowell is a soldier.
> Lowell is a coward.

He may be—or he may not be—a coward.

Use of an indefinite word such as "some" in a minor premise also can cause errors:

> All vegetarians abstain from meat.
> Some women are vegetarians.
> All women abstain from meat.

The only conclusion which can be drawn here is that "Some women abstain from meat." And, even then, not all of that small group do so because they are vegetarians.

If reliable conclusions are to be drawn, the major premise must be specific. If it is a generalization beginning with "most" or "some," beware! No valid conclusions can be made. Be sure the premise can be stated in positive or negative terms:

> All men are mortal.
> No man can serve two masters.

The first is a "universal affirmative"; the second, a "universal negative."

(f) A special problem in positives and negatives is found with hypothetical syllogisms—those which begin with "If." Consider:

> If you give to the Red Cross, lives will be saved.
> You will give to the Red Cross.
> Lives will be saved.

This conclusion, though inspiring, is debatable. It has not been demonstrated that your gifts to the Red Cross will really save lives. If giving can save lives, the size and type of gift ($10,000 or a quart of type B blood) may have a great deal to do with results. Beware of "if."

Just as much difficulty can result from affirming the consequent or the second term of the major premise:

If Jack wants money, he will save.
Jack will save.
Jack wants money.

The conclusion *may* be correct, but Jack may be saving only to buy a new car, not to become rich. Or he may be aware that there are easier ways to get money than merely having a savings plan, but he also has a savings program, from force of habit, begun in childhood.

If, however, the antecedent is affirmed, the conclusion becomes valid and certain:

If Jack wants money, he will save.
Jack wants money.
He will save.

It does not follow that a denial of the consequent guarantees a denial of the antecedent. For example:

If Jack wants money, he will save.
Jack won't save.
Jack doesn't want money.

Jack may want money desperately, but he may have discovered that it is often necessary to *spend* some to make some.

(g) If the major or minor premises are false, no matter how excellent the form of the syllogism, the conclusion will be false. It is possible that a syllogism can be *mechanically* correct and yet be untrue in fact.

A false major premise:

What was good enough for grandpa is good enough for me.
A horse and buggy was good enough for grandpa.
A horse and buggy is good enough for me.

The minor premise may be true enough, but the major premise is certainly open to dispute, and, hence, the conclusion also.

And a false minor premise:

Lovers of freedom are our friends.
Stalin was a lover of freedom.
Stalin was our friend.

Assuming the truth of the major premise, most Americans would not grant the validity of the minor premise, from a brief review of modern history. The conclusion, then, must also be considered invalid.

Occasionally, when the falsity of the major or minor premises is so painfully apparent that even the most calloused twister of logic is reluctant to state it, the offending premise will be "suppressed." It is *implied,* rather than stated.

A "slick" but rather dishonest form of suppression is this:

> Elect Jake Barnes sheriff.
> He's a home-town boy and a veteran.

Formally stated, the syllogism would look this way:

> All home-town boys and veterans should be elected sheriff.
> Jake Barnes is a home-town boy and a veteran.
> Jake Barnes should be elected sheriff.

Suppression of premises, then, is dangerous only when the hidden premise is untrue or open to question.

(i) There are other more complicated possibilities for mechanical error in deductive reasoning. Reference to any of the standard texts in logic or group discussion listed in the Appendix will provide fuller explanation of these fountainheads of fallacies.

d. Errors in Logic Caused by Emotion or Evasion: Misstatements of fact can be more easily detected than mechanical errors in logic. Mechanical errors in logic, if one is trained in inductive and deductive method, may be easier to find than errors caused by emotional distortions, that is, appeals to desires, prejudices, and fears. Fortunately or unfortunately, the human race *has* desires, prejudices, and fears, and it frequently throws logic out the window when questions involving its emotions or biases are being considered. For that reason, it may prove useful to consider some of the more outstanding fallacies which result when emotions invade the field of logic. Some of these fallacies apply to both induction and deduction; some apply only to induction. Most of them, however, are fallacies to be found in deductive reasoning, and they usually belong to the class of false major premises. With a false premise that is accepted because of its emotional appeal, a speaker or writer can concoct a perfectly valid

syllogism which is mechanically correct. Here is where many amateur logicians become trapped. They test the structure of the deduction—or induction—and find it meets the requirements, but their own desires and fears prevent them from subjecting the major premise to a thorough examination.

It should be kept in mind that the fallacies discussed here are not all the product of unscrupulous demagogues who wish to play on the emotions of the people. Each man can recognize fallacious arguments which he uses daily, either through carelessness or through habit. For effective conferences, it is important to become aware of any habitual fallacious reasoning in oneself and in others, as well as to be on guard against deliberate emotional appeals.

(1) Misleading Definition: Clever speakers may take advantage of less-experienced listeners by stating definitions in vague terms which permit unscrupulous conferees to shift their ground. "Freedom is essential in Democracy," one might say, and then proceed by easy steps to demand that taxes be revoked, as a restriction of freedom.

(2) Statement of Values or Opinions as Facts: It may be a fact that Albert Einstein said, "Happiness is for the hogs." That does not necessarily make it true. Value judgments, even by authorities in the field, must always be labled as evaluations, not facts. Again, shrewd speakers may make flat statements of opinion in such a way that the unwary may regard them as facts: "Scientists have known for years that there is life on other planets."

(3) False Dilemma: Instead of the traditional "two sides to a question," there are probably more nearly fifteen, as most conference situations will reveal. The false dilemma ignores all possibilities, save two. One is contrived to be so horrible that the other *will have* to be accepted, if the listeners honor the choice. An example: "If we don't declare war on Russia right now, she will destroy us next year."

(4) Sarcasm or Ridicule: Rather than answer the arguments or claims of the opposition, the speaker belittles them. "I don't think the childish mouthings of my esteemed opponent are worth answering."

(5) Antiquity: "If it's old, it must be good." The speaker tries to con-

vince the listener that what our ancestors thought and did must be correct simply because it is ancient.

(6) Antichange: Another version of the argument from antiquity, this habitually fights alteration in the *status quo* on the ground that what exists works, while what is suggested has never been tested, and therefore may prove worse. The classic slogan is, "Don't change horses in the middle of the stream."

(7) Novelty: "If it's new, we ought to try it." The converse of the appeal to age, this fallacy is particularly good bait for people who fancy themselves as liberal, modern, and given to open-minded experiment. A few examples: "We're not living in the Middle Ages!" "The proof of the pudding is in the eating."

(8) Ignorance: The speaker argues that his proposition is correct because no one else has the facts to refute it. That does not mean that such facts do not exist. "If any man here can show this Wizard Oil won't kill disease, let him step forward!"

(9) Irrelevant Analogy: By making superficial comparisons which are valid, a dishonest speaker may convince a naïve listener that other unjustified comparisons are also valid. This device can also be used in comparing items which are in no way related to each other or to the point at issue in discussion. A favorite: "If God wanted man to fly, he'd have given him wings like the birds."

(10) Obscurity: Use of impressive but meaningless phrases may dazzle listeners so that they fear to argue the issue, lest they expose their ignorance. Perhaps the speaker's argument is one they would agree with, but their vocabularies are too small to enable them to know this. If so, a listener should swallow his pride and ask to have the argument in plain words. If it can't be done, there may be no real argument. "The frivolous contiguity of deliquescent arborea demonstrates the effective extraneousness of my peripetia."

(11) Misleading Explanations: Often plain talk will be just as deceptive as "five-dollar" words. Instead of dealing with the point under consideration, the guilty speaker glosses quickly over it, moving into an extensive and exhaustive description of something completely unrelated. When he has finished, the listener

may have surrendered either from fatigue or fear that he will betray his stupidity by not having understood the connection. "I have been asked to show why truck drivers' wages should not be raised. In order to do that, may I take you back to the year 1911, when I was a small boy on a farm in Colorado? At four o'clock in the morning, I remember, we used to. . . ."

(12) Name-calling: This can take two forms: calling a *person* a name or labeling his *proposals* with derogatory terms. In the first, the attempt is to divert attention from consideration of the issues by focusing on personalities. In the second, the attempt is to discredit the issues themselves. (1) "I wouldn't stoop to argue with a man who's openly suspected as a Communist." (2) "Senator Klunk's give-away bill is designed to make paupers of the American taxpayer."

(13) Loaded Words: Closely related to name-calling, this fallacy relies on the connotative, rather than the denotative value of words. In terms of dictionary definitions, the words may be quite respectable, but there may be offensive emotional connotations which have grown up around them. Prior to World War II, the now deadly word "collaborate" was a term of praise, meaning "work together" or "cooperate." Some words, such as "Negro," "Russian," "English," "rich," "dirty," "red," "yellow," take on fantastic emotional colorings in certain verbal surroundings.

(14) Words Which Sound Like Other Words: Dishonest speakers comb Webster for these. A recent candidate for political office lost many votes from uneducated constituents who were told that he ". . . made no secret of the fact that he had openly *matriculated* at college, and practiced *cohabitation* with his wife, who was a notorious *thespian.*"

(15) Sympathy or Sentiment: Here the attempt is to evade the issue by appealing to the gentler emotions. The young lady may have robbed the First National Bank, but the lawyer says, "Friends, her tiny baby was starving. Who among you would not have done the same to preserve this darling infant, clinging to life by such a fragile thread?"

(16) Popularity: "Everyone's doing it, so it must be right," runs this

argument. "Fifty million Frenchmen can't be wrong." Experience has shown that they occasionally are.

(17) Authority in the Wrong Field: A common device in advertising, this fallacy results when an expert in one field is quoted as an authority in another where he is *not* qualified to "expertise." "Famous actor José Pintados says, 'I smoke Dromedaries because they are so good for my lungs.'" "Sam Slogan, internationally known golf champion, always serves Biloxi House Coffee. 'It improves my memory,' says Sam."

(18) False Cause and Effect: "After that, therefore, because of that." Just because one event follows another in a time sequence does not mean there is any causal connection between the two. Once people believed the sun would not rise unless the rooster crowed. Today, explosions of the atomic bomb are thought to be the cause of almost every ailment and trouble known to man. They may ultimately prove to be so.

(19) Complex Question: "Have you stopped beating your wife?" "Mr. Senator, have you acknowledged the paternity of your illegitimate son?" "Miss Lotus Lovely, are you planning to marry the man with whom you've been living in sin?" Whether the answer is "Yes" or "No," the person being questioned has implicated himself. A refusal to answer such an unfair question, unfortunately, will often be interpreted by an audience as a silent admission of guilt.

(20) Objections: "A lot of *sensible* people are opposed to this plan." The speaker implies that the proposal should be rejected because agreement on it is not unanimous.

(21) Irrelevant Conclusion: "The workers are agitating for higher wages, so they must all be Commies." This conclusion is in no way justified, for it makes no attempt to discover *why* the workers are agitating for higher wages. By substituting the irrelevant and emotional damnation, a dishonest speaker may trick his listeners into ignoring real causes and effects.

(22) Accident: "Europeans can speak many languages. I know a Swiss who speaks six different tongues." The error lies in taking an exception or an unusual case and citing it as generally true of all.

(23) Composition: "Pete is an average American boy who likes model railroads. All American boys like model railroads." Slightly different from the fallacy of accident, this error results from assuming that what is true of one member of a group will be true of all members. It *may* be true, but not always.

(24) Division: "Republicans are the wealthier class of Americans. Jack must be pretty well off, because he always votes Republican." This form of fallacy assumes that what may be true of a group in general, will be true of each member.

(25) Arguing in a Circle: Instead of offering evidence or arguments, the original proposition is restated to seem as if it were proof. "We don't want any Hottentots in America because we don't think Hottentots ought to be in the United States."

(26) Classification: Often important differences between objects, qualities, people, plans, or ideas can be concealed by classifying them together on the basis of some superficial similarity. "Russians and Americans are really a lot alike because they want peace and love good music."

The important thing for leader and conferee to remember is that there is no substitute for careful, thoughtful listening. If something sounds "funny" about an argument, chances are that one of the fallacies just mentioned has been committed. Whether the listener knows the Latin names or the English labels for these errors in thinking does not matter. What is vital is that he has detected a mistake so that it can be pinned down before it has a chance to do harm to the discussion.

III. Conclusion

A. SUMMARY: The conference is a form of guided, informal conversation, without an audience, which usually has as its goal problem-solution through the application of a six-step analytical method.

1. There are five kinds of conferences: informational, training, problem-solving, ideational, and conferences which are conferences in name only.
2. The analytical steps followed in conference problem-solving are:

   a. Awareness of a problem to be solved.

b. Location and definition of the problem.

c. Examination of the problem.

d. Discovery of possible solutions.

e. Establishment of criteria for testing solutions.

f. Choosing the best solution.

3. Deciding how best to put the solution into effect may be included in the statement of the solution, or it may require additional conferences.

4. Leaders control conferences not by force, but by establishing limits of discussion and by adroit use of questioning.

5. The preparation and participation of the leader should be guided by by the check list in this section.

6. Though the conferee bears much less responsibility than the leader, he also should be guided by the check list for preparation and participation.

7. Audio-visual aids and briefings will prove useful to both chairman and conferees.

8. There are some danger spots to watch for in conferences.

a. Personality problems in leader or conferees may cause trouble.

b. Presentation and discussion of materials may result in distortion or deception.

(1) Tests for facts and evidence will help safeguard against false or misleading evidence.

(2) Tests for fallacies in reasoning can reveal intentional or deliberate errors in thinking.

B. REMINDER: Remembering that "practice makes perfect" and that honest, reasonable compromise is the essence of good conference work, both leader and conferee can do much to make themselves and their conferences more effective.

APPENDIX | Suggested Readings

USE OF AUDIO-VISUAL AIDS

Arkin, H., and R. R. Colton, *Charts: How to Make and Use Them,* Harper & Brothers, New York, 1940.

Dale, Edgar, *Audio-Visual Methods in Teaching,* The Dryden Press, Inc., New York, 1946.

Exton, William, *Audio-Visual Aids to the Instructor,* McGraw-Hill Book Company, Inc., New York, 1947.

Haas, Kenneth B., *Preparation and Use of Visual Aids,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1946.

Karsten, Karl G., *Charts and Graphs,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1923.

Lutz, R. R., *Graphic Presentation Simplified,* Funk & Wagnalls Company, New York, 1949.

McKown, Harry C., and Alvin B. Roberts, *Audio-Visual Aids to Instruction,* McGraw-Hill Book Company, Inc., New York, 1949.

Miles, J. R., and C. R. Spain, *Audio-Visual Aids in the Armed Services,* American Council on Education, Washington, 1947.

Modley, R. H., *How to Use Pictorial Statistics,* Harper & Brothers, New York, 1937.

Peterson, L. V., *Use of Graphs in Air Force Teaching Materials,* Research Memo No. 14, Maxwell AFB, Alabama: Human Resources Research Institute, published by University of Illinois, Urbana, Ill., 1953.

Weaver, G. C., and E. W. Bollinger, *Visual Aids: Their Construction and Use,* D. Van Nostrand Co., Inc., Princeton, N.J., 1949.

Wittick, Walter, *Audio-Visual Materials,* McGraw-Hill Book Company, Inc., New York, 1953.

BRIEFING

Flesch, Rudolf, *The Art of Plain Talk,* Harper & Brothers, New York, 1946.

———, *The Art of Readable Writing,* Harper & Brothers, New York, 1949.

Nelson, J. Raleigh, *Writing the Technical Report,* McGraw-Hill Book Company, Inc., New York, 1952.

U.S. Air Force, *Presentations,* Washington, 1956.

CONFERENCES

Armed Forces Discussion Leaders' Guide, Office of Defense, Washington, 1950.

Conference Leadership: AFM 50–8, Department of the Air Force, Washington, 1951.

Cooper, Alfred M., *How to Conduct Conferences,* McGraw-Hill Book Company, Inc., New York, 1942.

Eubank, H. L., and J. J. Auer, *Discussion and Debate,* Appleton-Century-Crofts, Inc., New York, 1946.

Fansler, T., *Discussion Methods for Adult Groups,* American Association for Adult Education, New York, 1934.

Howell, W. S., and D. K. Smith, *Discussion,* The Macmillan Company, New York, 1957.

Judson, L. S., and Ellen Judson, *Modern Group Discussion,* The H. W. Wilson Company, New York, 1937.

Laird, D. A., and Eleanor C. Laird, *Sizing Up People,* McGraw-Hill Book Company, Inc., New York, 1951.

McBurney, J. H., and K. G. Hance, *Discussion in Human Affairs,* Harper & Brothers, New York, 1950.

Stigers, M. F., *Making Conference Programs Work,* McGraw-Hill Book Company, Inc., New York, 1949.

Tead, Ordway, *The Art of Leadership,* McGraw-Hill Book Company, Inc., New York, 1935.

Titus, C. H., *The Processes of Leadership,* Wm. C. Brown Co., Dubuque, Iowa, 1956.

Utterback, William E., *Group Thinking and Conference Leadership: Techniques of Discussion,* Rinehart & Company, Inc., New York, 1950.

LOGIC

Beardsley, Monroe C., *Practical Logic,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1950.

Clarke, Edwin L., *The Art of Straight Thinking,* Appleton-Century-Crofts, Inc., New York, 1929.

Dewey, John, *How We Think,* D. C. Heath and Company, Boston, 1910.

Hayakawa, S. I., *Language in Thought and Action,* Harcourt, Brace and Company, Inc., New York, 1949.

Johnson, Wendell, *People in Quandaries: The Semantics of Personal Adjustment,* Harper & Brothers, New York, 1946.

———, *Your Most Enchanted Listener,* Harper & Brothers, New York, 1956.

Rapoport, Anatol, *Operational Philosophy,* Harper & Brothers, New York, 1953.

PARLIAMENTARY PROCEDURE

Leigh, R. D., *Modern Rules of Parliamentary Procedure,* W. W. Norton & Company, New York, 1937.

O'Brien, Joseph F., *Parliamentary Law for the Layman: Procedure and Strategy for Meetings,* Harper & Brothers, New York, 1952.

Reeves, J. W., *Parliamentary Procedure,* D. C. Heath and Company, Boston, 1931.

Sturgis, Alice F., *Learning Parliamentary Procedure,* McGraw-Hill Book Company, Inc., New York, 1953.

SPEECH FUNDAMENTALS

Baird, A. Craig, and Franklin H. Knower, *General Speech: An Introduction,* 2d ed., McGraw-Hill Book Company, Inc., New York, 1957.

Barnes, H. G., *Speech Handbook,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1946.

Brigance, W. N., *Speech,* Appleton-Century-Crofts, Inc., New York, 1952.

Bryant, D. C., and K. L. Wallace, *Fundamentals of Public Speaking,* Appleton-Century-Crofts, Inc., New York, 1947.

Gray, Giles W., and C. M. Wise, *The Bases of Speech* (rev. ed.), Harper & Brothers, New York, 1946.

Karr, H. M., *Developing Your Speaking Voice,* Harper & Brothers, New York, 1953.

McBurney, James H., and Ernest J. Wrage, *Guide to Good Speech,* Prentice-Hall, Inc., Englewood Cliffs, N.J., 1955.

Monroe, Alan, *Principles and Types of Speech,* Scott, Foresman & Company, Chicago, 1939.

Sarrett, Lew, William T. Foster, and Alma Johnson Sarrett, *Basic Principles of Speech,* 3d ed., Houghton Mifflin Company, Boston, 1958.

Weaver, A. T., *Speech Forms and Principles,* Longmans, Green & Co., Inc., New York, 1942.

Winans, James A., *Speech-Making,* Appleton-Century-Crofts, Inc., New York, 1938.

Audio-Visual Bibliography

The audio-visual materials described below and on the following pages can be used to visualize and dramatize facts and concepts discussed in this book.

Motion pictures, filmstrips, and tape recordings are included in this bibliography, the character of each being identified by the self-explanatory abbreviations "MP," "FS," or "TR" following the title. Immediately after such identification is the name of the primary distributor and the year of production. Abbreviations used for these names are identified in the list of sources at the end of the bibliography. In many instances, the films can be borrowed or rented from local or State 16-mm film libraries, a list of which sources is given in *A Directory of 3,660 16mm Film Libraries,* available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Unless otherwise indicated, the motion pictures are 16-mm sound black-and-white and the filmstrips are 35-mm black-and-white and silent. The length of motion pictures and of recordings is given in minutes (min), that of filmstrips in frames (fr).

This bibliography is necessarily selective. Persons interested in locating additional resources should consult *Educational Film Guide* and *Filmstrip Guide,* standard reference catalogs available in most school, college, and public libraries.

SECTION 1. BASIC COMMUNICATION

Articulatory Movements in the Production of English Speech Sounds. Part 1: Consonants (MP, USVA, 1953, 25 min color) Through the use of animated drawings of the breathing process and direct photography of the movements of laryngeal and articulatory structures in a patient with extensive loss of facial tissue, illustrates the production of speech. Movements of the lips, mandible, tongue, velum, and pharyngeal constrictor muscles are shown in illustrations of oral continuant consonants, nasal continuants, plosives and affricatives commonly present in American speech.

Articulatory Movements in the Production of English Speech Sounds. Part 2: Vowels and Glides (MP, USVA, 1954, 26 min color) Through live-action photography of the movements of the laryngeal and articulatory structures in a patient with extensive loss of facial tissue, illustrates the production of vowels and their movements with glide sounds. Shows the importance of resonance as a factor in speech intelligibility through samples of connected speech.

Bridges for Ideas (MP, USC, 1951, 28 min) Describes communications media as bridges for ideas, and explains the importance of understanding the functions and techniques of language, motion pictures, radio and television, fine arts, and other means of communicating information and concepts.

Communications Casebook (MP, Strauss, 1956, 4 films, 8 min each) Case studies of situations in which failure to communicate effectively caused troubles which could have been avoided.

Communications Primer (MP, MMA, 1954, 22 min color) Illustrates recent theories on communications, and explains the nature of communication and its operations in modern civilization.

Function of Gestures (MP, McGraw, 1950, 11 min) Explains the functions of and demonstrates commonly used gestures in public speaking.

Making Yourself Understood (MP, EBF, 1954, 14 min) Uses a case study to analyze and illustrate the basic factors of communication, including predispositions of people as well as the content and style of the message.

Planning Your Talk (MP, McGraw, 1949, 11 min) Emphasizes the importance of planning and organizing a talk and explains the basic steps in such preparation.

Platform Posture and Appearance (MP, McGraw, 1949, 11 min) Emphasizes the importance of appearance and demonstrates good platform posture and movement.

Stage Fright and What to Do About It (MP, McGraw, 1949, 11 min) Explains the causes of stage fright, gives typical examples, and shows what can be done to overcome such fright.

Training Talks on Tape (TR, SdSem, 1954) Sound recordings, 20–25 min each, on 3¾- or 7½-inch-per-second magnetic tape. Following are titles and speakers:

Leadership Problems in Communication (Franklin S. Kaiman)
Dynamic Communication in Industry (Charles C. Gibbons)
Skills in Conference Leadership (Nathaniel Cantor)

Using Your Voice (MP, McGraw, 1950, 11 min) Points out that most speech and speaking faults are due to carelessness and demonstrates and explains how to correct such faults.

Your Voice (MP, EBF, 1949, 11 min) Describes the four phases of voice production — respiration, phonation, resonance, and articulation; and explains by animation and demonstration the various processes involved in speaking.

SECTION 2. AUDIO-VISUAL AIDS FOR SPEAKERS

Chalkboard Utilization (MP, McGraw, 1951, 15 min) Demonstrates various uses of the chalkboard (or blackboard) including methods of transferring drawings to the chalkboard.

Handmade Materials for Projection (MP, Ind U, 1955, 20 min color or b & w) Demonstrates how the basic principles of transparency, translucency, and opaqueness can be applied to the preparation of materials for use in overhead, slide, and opaque projectors.

High Contrast Photography for Instruction (MP, Ind U, 1956, 12 min color or b & w) shows how materials are prepared for photographic reproduction on high contrast film.

Language of Graphs (MP, Cor, 1948, 13 min color or b & w) Explains the use of graphs—bar, line, circle, and equation—to picture relationships and make comparisons.

Magnetic Recorder (MP, Iowa U, 1953, 19 min) Describes the characteristics of magnetic recorders and the methods of recording and erasing sound from magnetic tapes. Gives suggestions for editing and splicing.

The Opaque Projector—Its Purpose and Use (MP, Iowa U, n.d., 6 min) Describes different uses of the opaque projector and demonstrates how to operate the projector.

Projecting Motion Pictures (MP, UCLA, 1951, 10 min) Explains the relationships between the audience and the various elements in a projecting situation—seating, screen, loudspeaker, and projector placement. Assumes a knowledge of the mechanics of running a projector.

What Do You Think? (MP series, McGraw, 1953) Seven films, 6 minutes each, dramatizing problem situations, leaving discussion and resolution to the audience. Titles are:

Getting What You're After
Having Your Say
Honest Truth
Majority Vote
One Man's Opinion
Public's Business
Who's Running Things?

SECTIONS 3 AND 4. BRIEFING AND CONFERENCE TECHNIQUES

All I Need Is a Conference (MP, Strauss, 1954, 30 min) Dramatizes a situation of department heads being called together to solve a pressing company problem—some indifferent, some hostile, some harassed and worried, some too shy to speak. Recognizing these personality differences, the skilled conference leader helps all conferees to participate in thinking the problem through and agreeing upon a solution.

Buzz Session (MP, UAW, 1953, 22 min) Illustrates the "buzz session" or small discussion group method as used in the summer schools of the United Automobile Workers.

Conducting a Meeting (MP, McGraw, 1950, 11 min) Demonstrates and explains the basic parliamentary procedures which contribute to an efficient and successful meeting.

The Conference Method as a Selling Tool (MP, Texas, n.d., 32 min color) Portrayal of a pooling of group experiences to work out problems confronting salesmen and individual dealers. A film made to help dealers train themselves.

Discussion of the Social Sciences (MP, EBF, 1950, 22 min) A film record of an unrehearsed discussion in a first-year college class in social science. Points up the role of the instructor as leader and the contributions of the students to a well-planned, skilfully executed discussion.

Discussion Technique (MP, UWF, 1950, 28 min) Shows how to conduct a discussion

by forum, symposium, debate, panel, conference, and committee techniques; and how to stimulate independent thinking and free interchange of ideas among listed personnel.

Experiment (MP, GM, 1947, 12 min) Humorous explanation of how to influence people by gentle persuasion. Live action photography and cartoon animation.

Group Discussion (MP, McGraw, 1954, 10 min) Illustrates the various check points in group discussion, the basic types of group discussions, and the responsibilities of the leader.

How Not to Conduct a Meeting (MP, GM, 1941, 10 min) Burlesque of common errors and omissions frequently encountered in poorly planned luncheon meetings.

How to Conduct a Discussion (MP, EBF, 1953, 23 min) Explains and illustrates 11 principles to be observed by discussion leaders in order to achieve effective and satisfying group discussion.

How to Lead a Discussion (FS, Sch C, 1948, 81 fr with script) Pictures of the process and techniques of group discussion.

Our Invisible Committees (MP, NEA, 1951, 25 min) Explores the point of view that one of the important obstacles to group thought and decision-making is the conflict of social pressures which operate within individuals during a meeting. Presents a case study of such a group.

Parliamentary Procedure (MP, Cor, 1952, 11 min color or b & w) Shows parliamentary procedures used in a civic meeting, including reading of minutes, reports of standing committees, unfinished business, new business, etc. Illustrates the handling of motions and amendments to motions.

Parliamentary Rules of Order (FS, Mich U, 1954, 59 fr) Explains the necessity for rules of order and the use of parliamentary procedure. Gives illustrations of common procedural questions that arise in meetings and the answers to these questions.

Personnel Management (MP series, McGraw, 1953) The following four films in this series (each with a follow-up filmstrip) illustrate principles and procedures of conferences and discussions. Titles are:

Communications (12 min)
Employment Interview (11 min)
Grievance Hearing (15 min)
Supervisory Conferences (14 min)

Take the Fourth Part (MP, Baptist, 1955, 10 min) Shows how to prepare and present a discussion for a Training Union of the Southern Baptist Convention.

PRIMARY SOURCES

Baptist—Baptist Book Stores, 127 Ninth Ave., Nashville 3, Tenn.

Cor—Coronet Films, Coronet Bldg., Chicago 1, Ill.

EBF—Encyclopaedia Britannica Films, Inc., 1150 Wilmette Ave., Wilmette, Ill.

GM—General Motors Corp., 3044 W. Grand Blvd., Detroit 2, Mich., and 405 Montgomery St., San Francisco 4, Calif.

Ind U—Indiana University, Audio-Visual Center, Bloomington, Ind.

Iowa U—State University of Iowa, Bureau of Visual Instruction, Iowa City, Iowa

McGraw—McGraw-Hill Book Co., Text-Film Dept., 330 W. 42d St., New York 36, N.Y.

Mich U—University of Michigan, Ann Arbor, Mich.

MMA—Museum of Modern Art, 11 W. 53d St., New York, N.Y.

NEA—National Education Assn., 1201-16th St., N.W., Washington 6, D.C.

Sch C—Schauffer College of Religious and Social Work, 5115 Fowler Ave., Cleveland, Ohio

Sd Sem—Sound Seminars, 2355 Beechmont Ave., Cincinnati 30, Ohio

Strauss—Henry Strauss Productions, Inc., 31 W. 53d St., New York, N.Y.

Texas—Texas Co., 135 E. 42d St., New York 17, N.Y.

UAW—United Automobile Workers, 8000 E. Jefferson Ave., Detroit 14, Mich.

UCLA—University of California, Los Angeles, Calif.

USC—University of Southern California, Department of Cinema, Los Angeles, Calif.

USVA—U.S. Veterans Administration, Film Library, Washington 25, D.C.

UWF—United World Films, Inc., 1445 Park Ave., New York 29, N.Y.